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KNOX SEED COMPANY

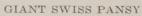
509 E. Weber Ave. STOCKTON 7, CALIF. 720 Tenth St. MODESTO, CALIF.

10 West Harding Way STOCKTON 17, CALIF.











CAMELLIA TYPE TUBEROUS ROOTED BEGONIA

FLOWER SEEDS

Something New

has been added to our catalog this year to help our garden friends to even more successful gardening.

Attached to each group of flowers, either at the family name or at the variety name, you will find the letters "Grp." and a number, which means: Group 1 (or 2, or 3, or 4, or 5).

We have thus classified all flower seeds listed, in 5 groups, according to their cultural requirements. If you wish to know how and when to sow a particular variety of flower, merely look for its Group Number.

Then turn to page 13

Under the heading

How to Raise Our Flower Seeds

you will find your Group Number which gives you the cultural directions you are looking for.

For additional information on soil preparation, watering, etc., see the boxes in the lower right-hand corner of each right-hand page.

AGERATUM (a) Grp. 2

Fluffy blue flowers all summer on dwarf compact plants. Easily grown in any soil. Excellent for edgings or rock gardens.

Midget Blue. Silver Medal All America Selection 1940. Fine dwarf Ageratum 2 to 3 inches high, smothered with small, true Ageratum blue flowers. Pkt. 10c.

Blue Ball. Compact round plants, 6 inches tall, hidden by a mass of pure blue flowers. Pkt. 10c.

ALYSSUM, Madwort

Blooms the entire season; popular for beds and edging in summer, or for growing in pots and boxes for winter bloom. Carpet of Snow (a) Grp. 2. White flowers on 3-inch plants. Pkt. 10c.

Saxatile compactum (p) Grp. 5. Basket of Gold. Compact plants covered with a wealth of golden blossoms in early spring. 12 inches. Pkt. 10c.

Maritimum (Sweet Alyssum) (a) Grp. 2. Fragrant white flowers all season. Pkt. 10c.

Violet Queen (a) Grp. 2. Neat low plants with an abundance of sweetly scented flowers of a very rich deep shade of violet. Neat in habit and free flowering. Pkt. 10c.

ANCHUSA Summer Forget-Me-Not (a) Grp. 2

A free-flowering annual with charming Forget-Me-Not-like blooms in grace ful sprays from early summer until late fall,

Blue Bird. Deep blue flowers on plants 18 inches tall. Pkt. 10c.

ANTIRRHINUM See Snapdragon

ARCTOTIS HYBRIDS (a) Grp. 4

Autumn Shades. A gay and cheerful member of the daisy family. Dozens of blossoms in many shades of red, orange, and yellow, from early spring onward. Attractive gray-green wavy edged leaves. Mixed, Pkt. 10c.

ASTER (a) Grp. 4

We can imagine no other flower which combines so much beauty and grace with usefulness; or one capable of more brilliant effects. From July until September the Aster reigns supreme in the garden. For these reasons we give a great deal of attention to these flowers and are in a position to offer our patrons remarkably fine strains, producing perfect flowers of great beauty. To do well Asters require a rich soil kept open by continuous cultivation.



CREGO ASTER

American Beauty Wilt Resistant. Robust, branching plants 2½ to 3 feet high. Large double flowers of fine form in early September, Finest mixed. Pkt. 10c.

IMPROVED CREGO WILT RESISTANT. The large shaggy flowers with long curled petals are not unlike the ostrich feather for which they are commonly named. The plants are strong, heavily branched and grow about 2½ feet in height.

Blue Flame. Bright navy blue. Pkt. 10c.

Crimson. Glowing deep rose-crimson. Pkt. 10c.

Cattleya. Fascinating shade of orchid. Pkt. 10c.

Purple. Showy violet-purple. Pkt. 10c.

Pink. Beautiful shell pink. Pkt. 10c.

Rose. Lovely bright carmine rose. Pkt. 10c.

White. Purest white, large and fluffy

Crego's Finest Mixed. Pkt. 10c.



AGERATUM

Improved Giants of California. Combining the Crego type of flower with the Beauty Aster's long unbranching stems, this full flowered race of Asters stands at the head of the list. Finest Mixed, Pkt. 10c.

Super Giant El Monte. Deep glowing crimson flowers with an abundance of daintily interlaced plume-like petals. Pkt. 10c.

Super Giant Los Angeles. Fully double shell pink flowers 6 to 8 inches across borne upright on long stiff stems. The graceful petals are delicately interlaced. Pkt. 10c.

Aster, Wilt-Resistant, Princess Anne. The blooms have a full crested center surrounded by several rows of strong guard petals of the well known Peach Blossom shade, opening delicate pink and turning rose-pink as the flower matures. Pkt. 10c.

Wilt Resistant Princess Bonnie. Freely producing large blooms of a delicious soft salmon rose shade, which remain in good condition two weeks or more. Long stemmed. Pkt. 10c.

Wilt Resistant Princess Marsha. Vibrant cinnabar scarlet petals contrasting strongly with the rich gold centers of the young flowers. Pkt. 10c.

Queen of the Market. Wilt resistant. Fully double flowers 3 inches across on branching stems in early August. 20 inches tall. Attractive Mixture. Pkt. 10c.



PRINCESS ASTER



CALLIOPSIS GOLDEN CROWN

BLUE FERN FLOWER



BALSAM

BABY'S BREATH, Gypsophila

Airy sprays of white flowers, lovely for bouquets.

Brilliant Carmine (a) Grp. 3. Dainty bell-shaped blooms. Make sowings two weeks apart for continuous flower. Pkt. 10e.

Elegans Grandiflora (a) Grp. 3. London Market Improved. Single large white flowers. Height 2 feet. Pkt. 10c.

Paniculata Double White (p) Grp. 5. Hardy perennial with sprays of tiny rose shaped blossoms. If cut before the flowers are fully opened sprays can be used in winter bouquets. 3 ft. Pkt. 10c.

Paniculata Single ,White (p) Grp. 5. Double form of the above. Excellent for fresh or dry bouquets. Pkt. 10c.

BACHELOR'S BUTTON or CORNFLOWER, Centaurea

Cornflower, Jubilee Gem (a) Grp. 3. Compact plants a foot high, literally covered with flowers. Pkt. 15c.

Cornflower, Cyanus Double (a) Grp. 3. This superb class of Cornflower has handsome large double blooms, 2 to 3 feet tall.

Blue Boy. Pkt. 10c. Pinkie. Pkt. 10c. Snow Man (white). Mixed. Pkt. 10c. Pkt. 10c.

BALSAM Lady Slipper (a) Grp. 2

An old and popular garden flower of easy culture. Gorgeous masses of brilliant double flowers are produced in the greatest profusion. An excellent flower for your shady corner. Height, 2 feet.

Camellia Flowered. Most improved type Finest mixed. Pkt. 10c.

BEAN (a) Grp. 2

Scarlet Runner. A rapid climber, flowering profusely; grows 10 to 15 feet high. Edible as well as ornamental. Pkt. 10c.

BELLIS English Daisy (p) Grp. 5

This cheerful little perennial thrives in cool and shady locations. Sow in fall or spring. Mixed. Pkt. 10c.



CANDYTUFT

BLACK EYED SUSAN Thunbergia (a)

Beautiful rapid growing annual climber, preferring a warm sunny situation. Used extensively for hanging baskets, vases, low fences, etc. Very pretty flowers in buff, white, orange and other shades, with dark eyes.

Alata. Finest mixed. Pkt. 10c.

BLUE FERN FLOWER Nierembergia

Purple Robe (a) Grp. 4. Bronze Medal All America Selections, 1942. Very dwarf cushion-like plants with flowers of violet blue. In bloom for a long period. Pkt. 25c.

BUTTERFLY FLOWER Schizanthus (a) Grp. 2

One of our finest hardy annuals. Showy flowers of various colors, closely resembling some species of Orchids.

Waller Franklin Strain. Giant Flowering Hybrids, an extra select, compact, large flowered strain, containing a perfect blend of many colors. Pkt. 15c.

See Poppy

CALENDULA Pot Marigold (a) Grp. 2

Blooms freely in early summer and continues into fall, requiring little care to grow to perfection. 18 to 24 inches high.

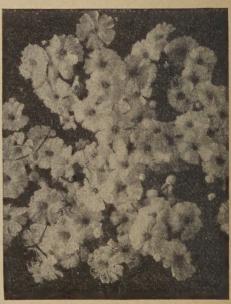
Campfire Improved. A very deep strong orange with distinct scarlet sheen on upper side of each petal. Blooms are flat across top, 4 inches in diameter. Pkt. 10c.

New Sunshine Calendula Chrysantha. A clear Buttercup yellow with loosely arranged petals, incurved at the center, and reflexed at the edges. The foot-long stems are strong and wiry. Pkt. 10c.

Trial Ground Mixed. Chrysantha type. Loose, large, two-toned flowers. Pkt. 10c.

Orange King. Very large, deep orange red with dark centers. Pkt. 10c.

Radio. Hemispherical flowers with quilled petals of a rich glowing orange. Graceful and attractive. Pkt. 15c. Double mixed, Pkt. 10c.



BABY'S BREATH

CALLIOPSIS (a) Grp. 3

Very showy subject for garden decoration and cutting.

Golden Crown. Large fragrant showy flowers of rich orange yellow or gold with maroon center. Pkt. 10c.

Tall Mixed. All double. Contains a wide range of color combinations, mostly bicolored. Pkt. 10c.



CANTERBURY BELLS

CANDYTUFT (a) Grp. 1

Valuable for masses and edging. Highly desirable for bouquets.

Giant White Hyacinth Flowered. Very fine for cutting. Pkt. 10c.

Umbellata Mixed. Pkt. 10c.



CORNFLOWER JUBILEE GEM

CANTERBURY BELLS

Campanula Medium (b) Grp. 5

Calcycanthema, Cup and Saucers. The most beautiful type with large bell- or cup-shaped flowers surrounded at the base by a large calyx of a similar color, the whole resembling a cup and saucer. In separate colors, pink, light blue, dark blue, white and purple. Pkt. 10c. Finest Mixed. Pkt. 10c.

Single. A form with charming pyramids of fluted bells. 2 to 3 feet. Mixed, Pkt. 10c.

CARDINAL CLIMBER (ac)

Graceful climber with cardinal-scarlet blooms 1 to $1\frac{1}{2}$ inches in diameter. Rich, glossy, dark green foliage. Grows 15 feet tall and is in bloom all summer.

Ipomoea Cardinal. Pkt. 10c.

CARNATION (p) Grp. 5

Few flowers surpass in beauty of form or delicious fragrance the richly-hued carnation.

Chabaud Giant. 18 inches. This variety blooms six months after seeding and continues throughout the summer. The plants, robust and erect, supply handsome, double, clove-scented flowers of extra large size. Pink, white, red and yellow. Pkt. 25c.

English Giants Mixed. A most complete collection of colors including many rare shades. Well grown plants, disbudded to one or two blooms per stem, will produce flowers closely approaching those grown by florists. Pkt. 50c.

Mixed Colors. Pkt. 25c.

CASTOR BEAN Ricinus (a) Grp. 2

Magnificent, tall, large leaved plants of tropical appearance, succeeding in a warm, sunny location. Beautiful for large foliage groups and background. Height, 10 to 12 feet.

Mixed Varieties. Pkt. 10c.

CLARKIA (a) Grp. 3

A truly charming annual of the most graceful habit, flowering in July. Rose flowers in long racemes.

Elegans. Double choice mixed. Height 2 feet. Pkt. 10c.

COCKSCOMB Celosia (a) Grp. 4

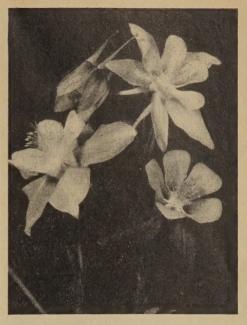
A showy annual producing massive heads of bloom in rich shades of crimson and yellow.

Cristata. Choice mixed. Height 9 to 18 inches. Pkt. 10c.

Plumosa (Improved Feather Type). Choice mixed. Height 8 feet. Pkt. 10c.



CELOSIA CRISTATA



COLUMBINE

Aquilegia (p) Grp. 5

These are among the most beautiful of spring and early summer flowers; very effective when grown in the herbaceous border and groups among shrubbery. Long-spurred flowers on graceful s.ems 2 feet or more above the fern-like foliage.

Mrs. Scott Elliott's Strain. One of the f.nest tall strains ever developed, long-spurred, large flowers, in a splendid mixture of colors.

Blue. Pkt. 15c. Mixture. Pkt. 15c.

Long Spurred Blue Shades. Larger flowered than the other colors, these are of the most beautiful shades of blue ranging from azure blue of the Cambridge Blue Delphiniums through Belladonna to the Forget-me-not, all with a rich cream center. A perennial blooming the first year from seed in most climates. Pkt. 10c.

Preparing the Soil



The ideal soil for seed is light and porous but will hold moisture enough to permit good germination.

A good soil mixture for seeding either indoors or outside is: ½ light loam, ¼ sand and ¼ granulated peat moss. The addition of leaf mold improves the mixture. The top 2 inches of a seed bed should be screened through a ¼-inch mesh screen. The ingredients should be thoroughly mixed and, just before sowing, firmed down with a flat block of wood or similar implement.



COSMOS SENSATION MIXED

CORAL BELLS Heuchera (p) Grp. 5

A low growing hardy perennial plant with heart shaped leaves, which form a low clump 6 to 8 inches high and bearing during summer, loose graceful sprays of red flowers in great profusion.

Spitfire. Large, rich scarlet. Pkt. 25c.



CORAL BELLS

COREOPSIS (p) Grp. 5

One of our most popular perennials; the attractive flowers are borne in great profusion and are excellent for cutting. Height, 3 feet.

Grandiflora Double Sunburst. Much of the beauty of early summer gardens is due to the brilliant golden yellow of Coreopsis plantings. The double flowers are large, 1½ to 2 inches across, deep golden yellow, and are excellent for cutting as well as for garden decoration. Fine keepers; plants are easy to grow. Pkt. 10c.

COSMOS (a) Grp. 3

No garden is complete without Cosmos. These old favorites supply a gorgeous, colorful effect during late summer and fall. Fine for cutting as the flowers last well in water.

Early Klondyke Orange Flare. The longstemmed flowers of bright vivid orange are freely borne on 2 to 3 foot plants. Its most remarkable feature, however, is its early blooming habit. It blooms from mid-summer until frost. Pkt. 10c.

SENSATION COSMOS

A superior type for cutting and all around use. Flowers 4 to 5 inches across on 3- to 4-foot plants.

Dazzler. A luscious shade of velvety crimson maroon. Pkt. 15c.

Pinky, A delightful rose-pink, Pkt. 10c. Purity, Glistening white, Pkt. 10c.

Radiance. Winner of the highest award in the 48 All America trials, Radiance introduces two entirely new colors in Sensation Cosmos: Striking deep rose and rich crimson, in the first bicolor Cosmos ever to be developed. Pkt. 25c.

CYNOGLOSSUM (b) Grp. 2 Blue Chinese Forget-Me-Not

Firmament. A hardy biennial of the easiest culture, forming strong plants about 18 inches high and producing through the summer months sprays of Forget-Me-Not-like flowers. Will bloom the first season if sown early. Pkt. 10c.

DAHLIAS

From Seed (rp) Grp. 5

Improved Unwin's Dwarf Hybrids. These double and semi-double Dahlias are one of England's best contributions to the flower world. They grow from 18 inches to 2 feet tall and come in many delightful shades. Plants are compact and are as easy to grow as Zinnias. Bloom the whole summer.

Mixed colors. Pkt. 15c.

Coltness Hybrids. Dwarf Dahlias which grow but 12 to 18 inches tall. Masses of single flowers in many brilliant colors make beautiful borders; also very useful for cutting as the flowers are borne on stiff stems. Flowers from early July to frost and require little care. Mixed colors. Pkt. 15c.



TRANSVAAL DAISY, GERBERA



CYNOGLOSSUM AMABILE

DAISIES

AFRICAN GOLDEN DAISIES,

Dimorphotheca (a)

The plants are of branching habit, growing about 15 inches high. An easily cultivated annual. Mixed. Pkt. 10c.

PAINTED DAISY, Pyrethrum (p) Grp. 5

This plant is cousin to the Chrysanthemum and Matricaria and should play an important part in many a well planted garden. Height, 1 to 3 feet.

Single Mixed. Radiating petals in many

Single Mixed. Radiating petals in many tones of rose and red about a golden center. Pkt. 10c.

SHASTA DAISY,

Chrysanthemum maximum (p) Grp. 5

Popular hardy perennial bearing large white blooms with handsome yellow centers. They are valuable for border decoration and especially pleasing in bouquets.



BRACHYCOME

SWAN RIVER DAISY Brachycome (a) Grp. 2

Brilliant free-flowering annual blooming throughout the summer and suitable for beds or borders. The dainty flowers resemble small Cinerarias. Height, 6 to 12 inches.

Mixed Colors. Pkt. 10c.

TRANSVAAL DAISY, Gerbera (p) Grp. 5

The large Marguerite-like flowers come in all shades of pink, salmon, red and yellow and are borne on long, stiff, straight stems. They require a warm, sunny position, good drainage and protection from frost. Single, Pkt. 25c.

DELPHINIUM (p) Grp. 5

Pacific Hybrids. A new strain of Delphiniums originated on the Pacific Coast to grow under Pacific Coast conditions. Huge flowers, $2\frac{1}{2}$ to $3\frac{1}{2}$ inches across, beautifully spaced on well balanced tall spikes. Highly resistant to mildew. Color range excellent and comes practically 100% double florets. Galahad, white; Summer Skies, light blue; Blue Bird: Guinevere, pink-lavender; Mixed, Pkt. 25c.

Chinensis, Cambridge Blue (a) Grp. 2. Branching heads of azure blue flowers, plants three feet high. Pkt. 15c.

FLOWERING TOBACCO Nicotiana (a) Grp. 4

Stately plants producing large, trumpet shaped blooms until frost. Fine for beds and borders. Height, 3 feet.

Affinis Hybrids, Mixed Colors. Pkt. 10c. Fragrant Red. Pkt. 10c.

Fragrant White. Pkt. 10c.

FOXGLOVE, Digitalis (b) Grp. 5

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost any conditions, giving a wealth of bloom during June and July. Height, 4 to 6 feet. Shirley Mixed. Pkt. 10c.

GAILLARDIA Blanket Flower (p) Grp. 5

Tones of orange, yellow, red, and maroon, often beautifully combined in a single blossom, make these flowering plants gay ornaments of the garden all summer. Height, 1 to 2 feet.

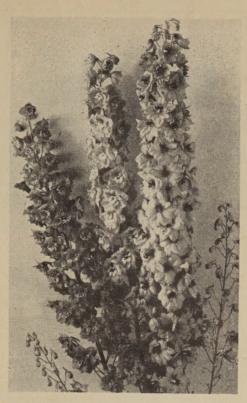
Grandiflora Portola Hybrids. (p) Semidouble blooms of magnificent size and broad overlapping petals, golden tipped around glowing centers of bronzy red. Fkt. 10c.

Dazzler. Large, well formed flowers, very vivid in the garden as the name implies. Golden yellow and maroon red. Striking perennial. Pkt. 10c.

Single Mixed. Daisy-like yellow and bronze, yellow center. Pkt. 10c.



GAILLARDIA



DELPHINIUM PACIFIC HYBRIDS

GERANIUM SEED (p) Grp. 5

A mixture of many lovely shades and types. Suitable for pot plants. Also excellent for the garden. Where frosts are encountered set plants, pot and all, in the garden for summer bloom. Pkt. 15c.

GEUM, Avens (p) Grp. 5

Beautiful hardy perennials, bearing profusely large, showy, double flowers all through the summer. An elegant flower for bouquets. Height, 18 inches.

Lady Stratheden. A new golden yellow with large full flowers of great beauty. Pkt. 15c.

Mrs. Bradshaw. Large, double, brilliant orange-scarlet. In flower throughout the entire summer. Pkt. 15c.

HEDDEWIGII See Pinks

HOLLYHOCK, Althaea (p) Grp. 5

The beautiful color effects produced by the planting of these flowers render them indispensable for the old-fashioned garden or the herbaceous border. Height, 6 to 12 feet.

Indian Spring. (a) Semi-double annual flowers of bright rose and rosy carmine. Its many flowered branches produce a continuous show until frost. Sow fall or early spring. Flowers five months from seed. Pkt. 10c.

Triumph. Double Mixed. Tall, very vigorous plants with many large flowers well placed on long tall spikes. The very large flowers are loosely doubled, well ruffled and fringed petals making them particularly attractive. The colors range through all the beautiful shades with pinks and salmon predominating. Many are two-toned art shades. Pkt. 10c.

Chater's Double, (p) Deep rose, salmon rose, scarlet, sunflower yellow, and white. Separate colors. Pkt. 10c.

LUPIN, Sun Dials (p) Grp. 1

Russell Lupins. Long, closely set spikes of flowers in a great variety of rich colors—deep yellows, oranges, reds, and brilliant bi-colors never seen in Lupins before. The florets are large with flat fanlike back-standards, and unlike all other Lupins, most of the spikes retain their florets throughout the whole period of development. Pkt. 25c.

LOBELIA (a) Gdp. 4

A dainty and continuous blooming annual of compact growth, remarkable for its profusion of beautiful blue flowers. Unexcelled for edging, ribbon beds, hanging baskets or window boxes. Height, about 6 inches.

Compacta, Cambridge Blue. A beautiful large flowered, light blue variety. Green foliage. Pkt. 10c.

Compacta, Crystal Palace. Erect and very free blooming. Best dark blue for edging. Fine for pots. Pkt. 10c.

Sapphire. A superb variety of pendulous habit; large deep blue flowers with conspicuous white eye. For hanging baskets and window boxes. Pkt. 10c.

GODETIA, Satinflower (a) Grp. 2

Very handsome annual plants, especially suited for semi-shady locations. Sow in spring in the open and thin to 8 or 10 inches apart. The flowers are bright and colorful and the single sorts are not unlike the Azalea in form.

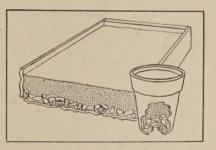
Tall Double. Long graceful spikes are decorated with double blossoms resembling satin pompons one above another. Height, 2 feet. Pkt. 10c.

LINARIA Miniature Snapdragon (a) Grp. 3

This interesting annual bears flowers which resemble miniature Snapdragons ending in single elongated spurs. It includes both trailing and erect growing varieties which are little known but worthy of greater attention. Height, 8 to 18 inches.

Fairy Bouquet. Small spikes of dainty. oastel flowers. Fragrant. Free-flowering and lovely in the border. Pkt. 10c.

Drainage is Important



For growing seed indoors either pots or shallow boxes known as flats, are satisfactory. Whichever you use be sure the drainage is good. In the case of flats see that the boards on the bottom are spaced about a quarter of an inch apart. When filling the seed flats place some material such as granulated peat moss along the cracks to prevent the soil from washing through the bottom. On the bottom half inch of the flat place gravel or soil screenings to help the drainage. If pots are used be sure to put some drainage material in the bottoms.





ACME ROTENONE GARDEN GUARD is an ideal insecticide for the home garden. Dust or spray. The killing ingredient is Rotenone — non-injurious to human and warm blooded animals. Acts both as contact and stomach poison against a wide range of insects. 1 lb. sifter carton....55c 1 lb. pump gun....70c

ACME DURADUST No. 50 contains 50% wettable DDT powder in micronized form. Can be used as a spray just like Arsenate of Lead by using 1 lb. to 50 gallons of water. Also can be extended for dusting. Many special uses in buildings, on cattle and in the fields.

50-lb. drums..\$31.00 1-lb. carton..90c 4-lb. bags..\$2.65

ACME ARSENATE OF LEAD is the widest used arsenical insecticide. Safe on tender foliage for the control of chewing insects on fruit trees, vegetables, tobacco, and many other plants, Controls grubs in lawns. 1-lb. carton....50c 4-lb. bag....\$1.30

1-lb. carton....50c 4-lb. bag....\$1.30 ACME RED RIVER POTATO MIX. Yes, DDT has been added to this effective product. Effectiveness against leaf hopper, psyllid and blight has been very greatly increased. Field trials prove Red River Mix increases marketable harvest 25% or more. Can be applied as dust or spray.

1 lb.....60c 4 lbs.....\$1.90



ACME TOMATO DUST is especially prepared to control blight and worms preying on tomatoes. While specifically designed for tomatoes, it also is equally effective in the control of leaf chewing insects and blight on many other vegetables such as potatoes, cucumbers, beans and cabbage, also many flowers as roses, azalea, evergreens, asters, and hollyhock. 1 lb. Sifter carton....50c 1 lb. pump gun....65c 4 lb.....\$1.15

4 lb.....\$1.15

ACME KOPPER QUEEN (Mildew Spray) is a stainless liquid copper spray for the control of mildew, leaf spot, and black spot on rose bushes, flowers, and many other kinds of foliage. Leaves no unsightly residue. A liquid spray replacing Bordeaux Mixture and Sulphur. ½ pint......35c Pint...60c Quart...95c Gallon...\$2.25

ACME BORDEAUX MIXTURE prevents

ACME BORDEAUX MIXTURE prevents large losses caused by blight, rot, mildew, scab, anthracnose, etc. Stimulates plant growth, increasing the harvest. Almost every kind of vegetable, fruit, and shrub can be improved by Bordeaux spraying.

1 lb......40c

ACME WETTABLE DUSTING SULPHUR is an improved dusting sulphur for home use which can also be used as a liquid spray. Controls red spiders on evergreen, mildew, leaf spoo, black spot, and rust on rose bushes, chrysanthemums, snapdragons, carnations, and certain other foliage. 98% passes through a 325 mesh screen. An excellent chigger chaser.

2 lb. sifter carton.....42c



ROTENONE GARDEN SPRAY (NNOR) containing Rotenone kills most common garden bugs of both sucking and leaf eating types. You've got to wet them—to get them. NNOR penetrates the waxy or hairy covering, brings the tremendous power of Rotenone into action.

6 oz.....\$1.00 Gals.....\$13.50 1 oz.....35c 16 oz.....\$2.15

ACME GARDEN DURADUST, a ready to use dust for home gardens. Contains 5% DDT and 9% copper fungicide. Effective against certain insects and plant diseases, particularly leaf hopper, corn earworm and rose chafer where present remedies are not entirely successful.

4 lb.....\$1.05 1 lb......50c

ACME EMO-NIK is a valuable spray for the control of scale, red spider, mealy bug, white flies, rust mites, aphis, and many other common insects. A complete contact insect spray combining nicotine in its most active form with Emo, a high quality summer oil emulsion. Practically odorless when sprayed. 4½ oz.....35c; Pint.....65c; Quart....\$1.00; Gallon....\$2.75

ACME APHIS SPRAY combines a soft spray soap with Black Leaf 40. Recommended for aphis (plant lice), thrip, leaf hopper, and many more hardy insects infesting rose bushes, flowers, shrubs, vines, bushes, and trees. 3 oz. collapsible tube 40c

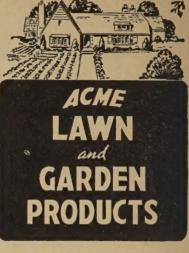
ACME LIME SULFUR. A standard 33° Baume lime and sulphur converted into a dry powder having all the effectiveness of a liquid product when dissolved in water. For dormant spraying against scale, peach For dormant spraying against scale, peach blight, leaf curl, and twig borer. For summer spraying against scab, soot, blotch, red spider, and mite. 5 lb.....\$1.55 lb.....37c

ACME WINTER GARDEN SPRAY. An oil spray for use in winter or early spring when trees and shrubs are dormant and better results can be secured in the control of certain insect pests. A clean-up spray to place trees and shrubs in the healthiest condition for spring growth.

5-gal. cans. . \$5.00 Gallons. . \$1.25



WEED-NO-M MAGIC WEED KILLER



ACME BAIT-M with METALDEHYDE is ACME BAIT-M with METALDEHYDE is an attractive insect bait for plant protection. Contains metaldehyde, the marvelous new discovery for control of snails and slugs. Also contains Calcium Arsenate effective against cutworms, ear wigs, sow bugs, grasshoppers, and certain other insects which migrate on ground.

1 lb.....35c 2½ lb.....65c

ACME SOWBUG CUTWORM KIL-ER. ACME SOWBUG CUTWORM KIL-ER. A strong attractive bait for the control of sowbugs (pillbugs) and cutworms. Just scatter on the ground over areas where pests are prevalent. Excellent results are obtained.

4-lb. bags..\$1.45 1½-lb. carton..65c 12-oz. carton...35c

ACME DAWG-GONE. Protect that evergreen—keep dogs away. Remove cap and hang tube of Dawg-Gone (opening down) in the lower branches of trees at the points of approach. Not necessary to place tube in every tree unless standing alone. The odor slowly emanating from the open tube will keep dogs at a distance—replaces unsightly wire screens or mechanical contrivances. trivances.

Tubes.....30c each

ACME KOPPER SHIELD—A pruning and tree wound paint. An antiseptic treatment to prevent such diseases as European canker fungus, hard rot, and certain other fungi from penetrating the wounds while the tree is naturally overcoming the shock. Covers twice as much surface as ordinary bituminous compounds.

1/2 pint.....40c
Pint..65c Quart..\$1.15 Gallon..\$3.50

ACME STOP. A sticky tree banding compound for use on trees, shrubs, and vines to prevent insects from crawling up to destroy foliage. Simplifies the spraying problem later. A gummy, sticky oil mass retaining stickiness over a long period. Easily removed from hands and tools with kerosene soaked cloth.

1 lb.....87c 7½ lb. \$5.00 6 oz. . . . 50c

WEED-NO-MORE, an entirely new product of modern chemical science, rids lawns of ugly weeds without injury to the surrounding grass or soil. Applied with a sprayer or sprinkling can, Weed-No-More penetrates quickly and goes to work on its victim almost at once. Sudden rains do not wash it

away.
The killing effect of Weed-No-More shows up within 24 hours. In a week, dead areas appear on the weeds—and before long the weed is completely shriveled and rotted away—roots and all.

Destroys weeds-roots and all!

You just SPRAY the lawn—weeds and all! Is quick-acting—penetrates quickly! Will not injure the soil! Is not poisonous to humans or animals! Will not stain hands or clothing! Will not harm common lawn

(Treats 1600 sq. feet)

Quart size\$2.98 (Treats 6400 sq. feet)



ORNAMENTAL GOURDS

ORNAMENTAL GOURDS (ac) Grp. 3

Ornamental Gourds are easily grown in rich soil, where they will produce plenty of fruits. They may be trained on trellises and the ripened fruits used for ornaments. Special mixture of large and small kinds. Pkt, 10c.

LARKSPUR (a) Grp. 3

Annual Delphinium are adorned with finely cut, feathery foliage which sets off to advantage the handsome long floral spikes of double blossoms.

GIANT IMPERIAL. Tall, upright, compact, basal branching in habit, the Giant Imperials have replaced all other types of Larkspurs for general garden use. Their Delphinium-like spikes of double florets are carried on stout stems 4 to t feet.

Blue Bell. Delightful clear light blue Upright with long base branching spikes. Pkt. 10c.

Blue Spire. Very deep violet blue. Outstanding color. Pkt. 10c.

Carmine King. Rich deep carmine and salmon flowers on long spikes; 3 to 4 ft. stems. Pkt. 10c.

Pink King. A lovely soft, yet vibrant shade of salmon rose. Fully double, two inch florets of rounded broad petals which are evenly and closely spaced on stems. Basal branched character gives several fine spikes of bloom on each plant. One of the earliest flowering of all Larkspurs. Pkt. 10c.



LARKSPUR GIANT IMPERIAL



MARIGOLD FLASH

Pink Perfection. Two-inch florets of rounded broad petals evenly and closely spaced on stem, giving a heavy Hollyhock-like cutting spike 24 in. long. Very free flowering. Color is luscious, lively light pink. Pkt. 10c.

White King. Flowers pure, glistening white, with extremely large double florets, evenly spaced on stem. Early, the finest Larkspur. Pkt. 10c.
Finest Mixed. Pkt. 10c.

MARIGOLD (a) Grp. 2

AFRICAN TALL DOUBLE (Tagetes erecta). Very large globular flowers composed of compact tubular or quilled petals. The stems should be cut carefully to avoid the somewhat disagreeable odor when bruised. Height, 2½ feet.

All Double Orange. An improved strain which produces practically one hundred per cent double flowers. Pkt. 10c.

Lemon All Double. A fluffy fully doubled variety with pale yellow blooms loosely quilled. Pkt. 10c.

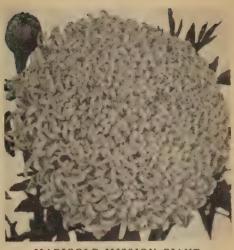
CARNATION FLOWERED, Guinea Gold (African). Carnation-like petals and unusually brilliant golden color makes this flower outstanding among Marrigolds. It lacks much of the pungent odor of other Marigolds. The plant blooms very freely. Height, 2 feet. Pkt. 10c.

Gigantea, Full Double Mixture. Flowers are largest ever known in Marigold. A mixture ranging from deep orange through golden orange, deep golden yellow, light yellow, lemon yellow, and a delightful new shade of primrose. Pkt. 10c.

DWARF FRENCH, Double Harmony Hybrid. Without question one of the very finest Marigolds introduced. Flowers charming and distinct. Scabiosa-like in formation with tubular deep orange center petals flanked by broad velvety dark marcon-brown guard petals. Plants are dwarf, about 1 ft. high, compact, free blooming. Early and attractive for cutting. Pkt. 10c.

Dwarf French, Flash. (Silver Medal 1945 All-America selection.) Single. Truly named because it is one of the most striking plants in the garden. Vivid 1½ inch flowers range from red, through bronze to yellow. Compact plants are covered with blooms from early summer until frost. Pkt. 10c.

Scarlet Glow. Single. 10 inches tall, well covered with flowers 1% inches across, which vary interestingly from deep scarlet to tangerine yellow. Pkt. 10c.



MARIGOLD MISSION GIANT

MISSION GIANTS, Mixed. Honorable Mention, All-America Selections, 1942. Large, two and a half inch flowers of bright, rich, clear yellow, on luxurious, large plants. Flowers are of double, incurved, Chrysanthemum-like form, and very attractive. Blooms late and lasts until frost. Uniformly three to five feet tall. Mixed. Pkt. 10c.

MINIATURE, Yellow Pygmy. Honorable Mention, All-America Selections, 1940. Light lemon yellow. Lilliput French double type, growing only 8 inches tall and compact. Flowers 1¼ inches across, freely produced. Excellent for edging and potting. Pkt. 10c.

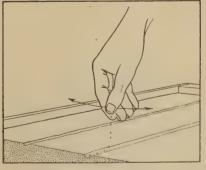
Miniature Spry. Extra dwarf, double French type: compact and uniform, so may be used for edging. About 9 inches tall, early blooming, with very light orange crested center and maroon outer petals. Profuse flowering. Pkt. 10c.

MIGNONETTE Reseda Odorata (a) Grp. 4

This old-fashioned flower still enjoys the greatest popularity. Grown for its sweet perfume, which is most pronounced when grown in a light sandy soil. Height, 6 to 10 inches.

Machet Mixed. Includes only large flowering varieties of sweet scented Mignonette. Pkt. 10c.

Sowing the Seed



Mark the surface of the flat or seed bed by pressing a narrow edged ruler or garden label lightly into the surface. Sow the seed thinly in the depressions, either directly from the seed packets, or by sifting it out between your thumb and forefinger. The seed should be covered lightly. A fine meshed kitchen screen serves very well for this purpose. Place a handful of dry soil mixture in the screen and sieve onto the seed drill.



MORNING GLORY HEAVENLY BLUE

MORNING GLORY Ipomoea (ac) Grp. 1

Climbers of rapid growth, with beautiful and varied flowers, invaluable for covering walls, trellises, arbors. They are invaluable.

Heavenly Blue. A variety that is bringing new popularity to Morning Glories. It is an early blooming climber, literally covered with lovely flowers of sky-blue. Flowers 3½ inches across and blooms until frost. Pkt. 10c.

Pearly Gates. Glistening white flowers are 4 inches or more across when fully open. The vigorous, rap d growing vines produce many flowers. Pkt. 10c.

Scarlett O'Hara. An entirely new color in the popular Morning Glories — rich dark wine red or deep rosy crimson. Flowers 4 inches in diameter, freely produced on fast growing vines. Very showy for covering a fence or trellis. The dark green foliage does not make a heavy growth, leaving plants graceful in appearance. Pkt. 10c.

Mixed Imperial. These are beyond question the handsomest of all Morning Glories. The flowers are of gigantic size. Pkt. 10c.



NEMESIA

NASTURTIUM (a) Grp. 1

GLORIOUS GLEAM HYBRIDS. Delightfully sweet scented; double. Color range includes brilliant blend of salmon, golden yellow, orange scarlet, cerise. cream, orange, maroon and crimson shades. Pkt. 10c.

Golden Gleam. Golden yellow, sweet scented. Pkt. 10c.

Scarlet Gleam. Fiery scarlet. Pkt. 10c.

DWARF DOUBLE GEM MIXTURE. An evenly balanced range of colors on dwarf, compact gem-like plants. Ideal annual for forder and edging use. Plants are dwarf and compact, totally without runners. Pkt. 10c.

DWARF OR BEDDING VARIETIES. Of dwarf, compact growth. Excellent for borders or for bedding, forming plants about 1 foot high by 1 foot across. Finest Mixed. Pkt. 10c.

TALL or CLIMBING NASTURTIUMS. For covering trellises, fences, arbors, trailing from vases, over rock-work, etc. nothing can equal their great quantities of bloom from early summer until frost. The seed pods can be grathered while green and tender for picking. Height, 8 to 10 feet. Finest Mixed. Pkt. 10c.



NASTURTIUM

NEMESIA (ra) Grp. 4

This plant is excellent for edging purposes. Plants send up many slender stalks crowned with fairy-like flowers, something like a Schizanthus. When the flowers fade they may be trimmed back and will bloom again. Their colors run from the brightest reds, yellows, oranges, to the brightest blues and purples. Compacta Triumph, Finest Mixed Colors. Pkt. 10c. Height 6 to 12 inches.

NEMOPHILA (a) Grp. 1

Small cup-shaped blossoms which are fine ground cover for bulb beds. Grows about 6 inches high.

Baby Blue Eyes (Insignis Blue). Sky blue with white eyes. Pkt. 10c.

NIEREMBERGIA See Blue Fern Flower

PANSY, Heart's Ease (b) Grp. 5

Swiss Giant. Within the last few years the blossoms of this strain have been remarkably improved in every way. The plants are compact in habit and produce immense flowers for a long blooming sea son. Attractive shades. Pkt. 25c.

Popular Bedding Mixture. These are the popular saucy faced beauties that everybody loves, comprising the finest varieties in all colors. Pkt. 10c.

PETUNIA (a) Grp. 4

The seed may be started indoors early in the year in seed boxes and later transplanted or sown out of doors in the spring. Cover very lightly and apply water with a fine spray. Be careful not to discard the smaller and weaker seedlings. From these the finest flowers are often obtained, the coarse growing plants frequently reverting to the common types.

Ruffled Nana Compacta—Little Giants Mixed. These 8 to 10 inch plants remain so compact and erect all season that this new variety is destined to become the most popular of all Petunias for the home garden. Ruffled deep-throated flowers of medium size continue to keep the plants completely covered all season. 3-inch blooms in unusual colors range from deep crimson to white in unique shades and markings. Pkt. 25c.

HYBRIDA NANA COMPACTA. 1 ft. A fine type of Petunia for small beds and borders; often used for pot culture. This Petunia keeps its dwarf stature very well throughout the blooming season.

Glowing Rose. A new Petunia with glowing rose flowers on well-rounded, mound-shaped plants. Starts to flower a month ahead of the nan compacta varieties and remains in bloom as long as the later kinds. Pkt. 25c.

Rosy Morn. Soft, rosy pink with white throat. Pkt. 10c.

Heavenly Blue (Silver Blue). Enchanting shade of light silvery blue. Dwarf. Pkt. 10c.

Snowball. Flowers pure white. Pkt. 10c.

Velvet Ball. Deep mahogany red flowers, larger than others in this group. Pkt. 10c.
Mixed. Pkt. 10c.

PETUNIA GRANDIFLORA (Large Flowered)

Dazzler. A new low-growing variety that maintains its uniform habit throughout the season. The color is a dazzling orange scarlet. Invaluable for borders and bedding. Pkt. 25c.

Elk's Pride. Very large, deep purple Pkt. 10c.

Snowstorm Improved. Glistening white shading yellow in throat. Pkt. 25c.



PANSY SWISS GIANTS



PETUNIA GLAMOUR

PETUNIA LARGE FLOWERED FRINGED

Theodosia. Soft rosy pink with contrasting golden yellow veined throat. An outstanding variety in this class. Pkt. 25c.

PETUNIA FRINGED AND RUFFLED Super Fluffy Ruffles. A new ruffled and frilled type of Petunia that has the appearance of being almost double. Flowers are very large with a deep throat. The mixture is well balanced with shades of pink and white, salmon, salmon pink, deep rose, rose, crimson, and light blue. Pkt. 25c.

RUFFLED GIANTS OF CALIFORNIA Glamour. Honorable Mention, All-America Selections, 1942. Large flowers of salmon-rose with brown veining on white in the throat. An excellent color under artificial light and outdoors. Most flowers have wavy, fringed petals although a few come plain edged. Pkt. 25c.

Supreme Strain. A new strain of rose and pink shades. Light, richly-veined throats surrounded by satiny petals



PETUNIA ROSY MORN

which are heavily ruffled. Large blooms. 5 to 7 inches in diameter, produced on strong, richly-foliaged plants. Excellent bedding variety; fine window box type. Pkt. 25c.

DWARF GIANTS OF CALIFORNIA

A dwarf sturdy growing type especially suited to pot culture. Flowers are beautifully ruffled and fringed with open well marked throats.

Ramona Strain. Dark and light shades mixed. Pkt. 25c.

PINKS (a) Grp. 2 (DIANTHUS)

Plant in full sun in any good garden soil. Sow in spring when danger of frost is past.

Heddewigii (Double). 10 inches. Very desirable pink in many color combinations for rock garden or borders. Pkt. 10c.

Heddiwigi Gaiety. The best annual garden pink. Pkt. 25c.

Dianthus Plumarius (Clove Pinks). Perennial. Double. Pkt. 10c.

Dianthus — Sweet Wivelsfield. Single mixed. Pkt. 10c.

FOR YOUR ROCK GARDEN

ROCK GARDEN PERENNIALS Mixed

A mixture of over 50 rare rock garden perennials with a maximum height of six inches. Some of the items will bloom almost as soon as the frost is out of the ground. Others will bloom later in the year, insuring the grower blooms all season. A planting, carefully made in a suitable place, should remain a beauty spot for a number of years without reseeding if given minimum care. Pkt. 50c.

DIANTHUS, Perennial Rock Garden Mixture

Twenty varieties of unusual species of dwarf perennials. When well grown, many plants will produce such an abundance of blooms that daily cutting of flowers will not decrease the loveliness of the plant. With an occasional replanting should last several years. Pkt. 50c.

ROCK GARDEN ANNUALS Mixed

This mixture of over 30 varieties, not exceeding 12 inches in height, will provide blooms through the entire season. Planted as early as possible, the gardener should have blooms by the end of May. A succession of blooms will follow until late fall when frost will destroy the flowers. A second lot of blooms may be enjoyed on most plants if they are cut back to two inches of the crown and properly watered.

Pkt. 25c



PHLOX GIGANTEA

PHLOX DRUMMONDI (a) Grp. 2

Gigantea, Rosy Morn. Bronze Medal, All-America Selections, 1941. An extremely refreshing, gay and bright color combination of rose pink with a white eye. A color that will not fade in the strong sun. This new variety possesses the large sized blooms, the free flowering quality and the fine habit of both Gigantea Brilliant Mixed and Gigantea Salmon Glory. Pkt. 25c.

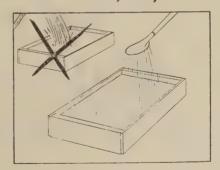
Gigantea, Salmon Glory. Silver Medal, All-America Selections, 1939. A good salmon in Phlox Drummondi Gigantea type. The individual florets are gigantic for Phlox, measuring from 1½ to 1½ inches in diameter. Color a pure salmon pink with a distinct creamy-white eye. One of the most beautiful color combinations ever seen. Pkt. 10c.

Gigantea Brilliant Mixed. Pkt. 25c.

PIN CUSHION FLOWER

(See Scabiosa)

Water - But Gently



Water the seed bed thoroughly, but gently, with a fine spray. A coarse spray or stream of water will wash the seed out of the soil. For this reason, when using an outdoor seed bed, it is well to have a cover available to place over the seed bed during rainy spells. This should be supported several inches over the seed bed to allow free circulation of air.

Be sure to keep the seed bed moist. Excessive dryness will prevent germination.



To keep your garden healthy know and fight its enemies:

FUNGOUS PESTS OF THE FLOWER AND VEGETABLE GARDEN



POWDERY MILDEW ON GRAPES R ROSES



EARLY AND LATE BLIGHTS
ON POTATOES TOMATOES



RUST ON SNAPDRAGONS HOLLYHOCKS





INSECT PESTS OF THE FLOWER AND VEGETABLE GARDEN

















EITHER WE BRING THEM UNDER CONTROL OR THEY OWN THE GARDEN





























BEETLES



PILLARS









EARWIGS GLADIOLUS THRIPS, RED SPIDER MEALY BUGS WHITE FLY

CAN'T HARM

Vegetables 3 Weeks Earlier!

Patented paper hothouses-completely protect plants from destructive Frosts, Storms, Insects. Ripen crops 3 weeks

earlier; increase yield 18% to 51%; maintain perfect Mulch. Big Garden Pkg. of 25 - only 60c. Setter Free. postpaid.

GERMAIN'S, Germaco Products Div., Los Angeles 21

Kill those here-and-there weeds by shaking Weedust directly from the ready-to-use can. For smaller lawns, for scattered weeds, for jobs that don't require a sprayer, Weedust in dry powder form is the ideal 2.4D weed-killer 12 Oz. Sifter Can 70c.





250, 4-inch size. .40c. Box of 125, 8-inch size. .40c. Box of 125, 16-inch size. .75c.

121-E

😭 🥯 Secret of bigger, better potted plants, garden flowers, vegetables!

Feed PLANTABBS to everything growing in your house and 🎉 garden. If you don't get lovelier plants and a greater yield of finer-flavored vegetables, you get your money back. PLANTABBS are convenient, clean, odorless, highly concentrated PLANT FOOD TABLETS which help produce sturdy stems, luxuriant leaves, strong roots, gorgeous blooms, perfect form and color.

Box of 10 tablets 10c; 30 tablets 25c; 75 tablets 50c; 200 tablets \$1; 1000 tablets \$3.50



POPPIES, Papaver

Poppies have long been favorite garden flowers for their delicacy, as well as the simplicity of the buds and neatness of the foliage. The pure colors and fine texture of the petals make a good showing in the garden. All are easily raised from seed which should be sown where the plants are to remain, later thinning to 8 or 12 inches between plants. In the North, sow in the open ground as early as possible in the spring; in California, sow from October to March.

Oriental Poppies (p) Grp. 5. Hardy plants with numerous leafy stems about 2½ feet bearing large showy flowers with a conspicuous black blotch on each petal. Mixed. Pkt. 15c.

SHIRLEY (a) Grp. 1. Most charming Poppy for the garden. The plants, with their deeply cut foliage, slender, hairy stems and silky petaled blossoms, often fluted, present a gay, airy picture. Height, 18 inches. Pkt. 10c.

Sweet Brier (Double Annual Shirley). Full, double begonia-like flowers of a beautiful deep rose pink. One of the finest strains of double Shirleys for the garden. Pkt. 10c.

All Double Mixed. Mixture of the best colors. Full double and semi-double flowers in a great variety of colors. Pkt. 10c.

ICELAND POPPY (p) Grp. 5. (Nudicaule). A hardy Poppy slightly resembling Shirley. Different in habit and contains many shades of yellow and orange. Height, 18 inches.

Kelmscott Strain. A superb mixture. All colors. Pkt. 25c.



CALIFORNIA POPPY

CALIFORNIA POPPY Eschscholtzia (a) Grp. 1

Grandiflora Hybrids. Large flowering varieties in the most exquisite shades of gold, copper, bronze, scarlet, purple and crimson. Mixed Colors. Pkt. 10c.

Ramona Hybrids. A new strain containing many lovely shades. The plants grow compact and upright, with flowers beautifully frilled. Mixed Colors. Pkt. 10c.

Aurantiaca, Orange. The ordinary California Poppy. Pkt. 10c.



SALPIGLOSSIS

PORTULACA Moss Rose (ra) Grp. 1

Brilliant hardy annual of easy culture; excellent for massing in beds, edging or rock work, thriving best in a light, sandy soil and a sunny situation. Flowers of the brightest colors. Height, 6 to 10 inches.

Double Mixed. Pkt. 10c. Single Mixed. Pkt. 10c.

RED HOT POKER Tritoma (p) Grp. 5

A perennial, not strictly hardy, but will live through the severe winters with a protective covering of leaves or manure; or the roots may be lifted and carried over winter in sand in a cellar. Height, 4 to 6 feet. It harbors gladiolus thrips

Mixed Hybrids. Pkt. 10c.

SATINFLOWER See Godetia

SALPIGLOSSIS Painted Tongue (a) Grp. 2

For delicate grace, richness of coloring, and velvety texture, the regal salpiglossis has practically no equal. From a low base of leaves rise slender wiry stalks which bear one or more large Lily-like flowers in a magnificent range of colors. Height, 1 to 2½ feet.

Superb Mixed. Pkt. 10c.

POT MARIGOLD See Calendula

SALVIA, FLOWERING SAGE

Scarlet sage is usually treated as an annual. Start the seed from January to May, and set out plants when weather becomes warm. Perennial in mild climates.

Bonfire Grp 4. The crimson spikes grow erect above the foliage, forming handsome globular bushes. Pkt. 10c.

Zurich Grp. 4. Dwarf and compact in growth, forming oval bushes 15 to 18 inches high, thickly studded with fine spikes of scarlet flowers. Pkt. 25c.

SCHIZANTHUS See Butterfly Flower

How to Raise Our Glower Seeds

We have grouped our seeds according to the culture they require. Find the group number in the alphabetical listing, for example, Ageratum, Grp. 2, and your cultural instructions in the column below.

Group Seeds in this group are difficult to transpiant.

Sow the seed where the plants are to flower, after the danger of frost has passed. Thin out to the desired distance when the seedlings are well started.

Group Seeds in this group are easily raised outside after the danger of frost has passed. Either sow them in their permanent positions or in a seed bed and transplant to the place where they are to flower.

Group Seeds in this group can be sown outside very early in the season, being very hardy. When the seedlings are big enough they should be transplanted to their permanent positions

Group Sow seeds in flats in early spring for best results. When seedlings are large enough to handle transplant to other fasts. Harden off gradually and plant into beds when the weather is settled.

Group In this group are most of the perennial seeds.

They can either be sown indoors in flats or outside. If sown outs de it is good practice to sow them in mid-spring so they will reach a fair size before the hot weather starts. After the seedl ngs are big enough to handle, transplant to allow room for grow.h. Plant in their permanent places in fall or, if the plants are very small, winter over in a cold frame and plant out the following spring.

For best results with biennials such as Sweet Williams. Canterbury Bells, Wallflowers and Beauty of Nice Stocks, sow them in summer. When the seedlings are large enough transplant or thin them so they will make sturdy plants by fall. At that time plant them where they are to flower. Handled in this way, these flowers will give a really good display.

Try interplanting some of these showy biennial flowers with your late-flowering Tulips for very pleasing effects.

SCABIOSA

Pin Cushion Flower (a) Grp. 2

Rosette. A beautiful Scabiosa of deep rose suffused with salmon. A "must have". Pkt. 10ε .

Salmon Beauty. Pure salmon with huge flowers. Vigorous. The stems are long and stiff, making it a most popular flower for garden or cutting. Pkt. 10c.

Imperial Giants, Blue Moon. An entirely different and improved flower and plant from the existing Scabiosa varieties. Fully double, extremely large and deep. Petals broad and wavy, entirely eliminating the pincushion center; rich deep lavender blue. Tall growing and very upright with long, wiry, heavy, stems in which the weak neck of the older types is completely eliminated. Ideal for cutting. Pkt. 10c.

Shasta. Pure white, very large flowers. Pkt. 10c.

Giant Hybrids. Mixed. Pkt. 10c.

HARDY PERENNIAL VARIETIES

Caucasica (p) Grp. 5. Giant Hybrids (Isaac House Strain). Fringed and ruffled, shades of blue from lavender to dark blue; very large flowers. Pkt. 15c.



SNAPDRAGON

SNAPDRAGON Antirrhinum (a) Grp. 4

SUPER GIANTS, RUST RESISTANT

Campfire. Luminous scarlet. Pkt. 10c. Copper Queen. Bronzy copper. Pkt. 10c. Crimson. Fiery Crimson. Pkt. 10c.

Paradise Rose, Rose pink. Pkt. 10c.

Rosalie. Rich deep rose with underlying tone of topaz or amber. The plants are base branching and produce from 6 to 8 huge long flowering spikes on which the florets are decidedly well arranged. An all-purpose Snapdragon. Pkt. 10c.

Cherry Rose. Bright cherry rose flowers of startling brilliance on 3-foot plants of uniform habit of growth make this Snapdragon highly desirable. Pkt. 10c.

Yellow Giant. Deep yellow. Pkt. 10c.

Finest Mixed. Pkt. 10c.

Tetra. Largest flowered of all snap-dragons, many individual flowers are ruffled. Seed comes in a superfine mixture including all the best snapdragon shades: orange, yellow, peach, canary, bronze, orchid, crimson, scarlet, pink, white. Main spike 2½ feet tall with many laterals. Excellent for cutting. Pkt. 25c.

SWEET PEAS

CHOICE MIXTURE SPENCER SWEET PEAS

Pkt. 10c; oz. 50c. ALL COLORS: Pkt. 15c; oz. 75c. PINK AND ROSE SHADES

Rose Pink. Silver Medal, All-Amer ca Selections, 1940. Large, wavy, rose-pink flowers on white ground. New type, maturing between the early flowering and the Spencer classes. Is taller and has longer stems than either of the others. Patricia Unwin. Salmon pink on a cream

Patricia Unwin. Salmon pink on a crean ground.

Pinkie. Rose-pink with large and frilled flowers. This variety is seldom affected by weather conditions and first-class Blooms can be cut all during its long blossoming period.

Jack Hobbs, Cream-pink, flushed scarlet. One of the largest Sweet Peas ever introduced.

Miss California. The color is a beautiful shade of rich pink, deeply flushed and shaded with salmon. Unsurpassed for either exhibition or cutting purposes.

LAVENDER AND BLUE SHADES

Ambition. Rich deep lavender, with a darker shade on the base of the standard and wings, lessening as the bloom ages. Gold Medal and Award of Merit.

Flagship. Deep navy blue.

Reflection. A beautiful shade of clear blue.

WHITE AND CREAM SHADES

Gigantic. An enormous white frilled flower of exquisite texture and artistic form. Black seeded.

Cream Gigantic. Large ruffled flowers of perfect form, free from pink or blush tinge. Black seeded.

ORANGE AND SALMON SHADES

Pirate Gold. Golden orange.

Smiles. Clear glistening salmon best describes this exquistie variety. The large flowers are beautifully waved and fluted.

CERISE SHADES

Mrs. A. Searles. Salmon-cerise, merging into a soft oriental red. A remarkable and distinct color.

Artiste. Clear Geranium pink; a rare color. Flowers are large and quite frilled. An outstanding Sweet Pea.

RED SHADES

Red Supreme. Deep crimson; an abundance of flowers on long stems.

Welcome. By far the best and most brilliant, dazzling, scarlet Sweet Pea. For exhibition or gardens it is supreme. Absolutely sunproof.



SPENCER SWEET PEAS

MAROON AND PURPLE SHADES

Warrior. Rich chocolate maroon. A magnificent variety which has held its place and popularity for a number of years.

Olympia. Deep rich purple of graceful form and immense size.

RUFFLED VARIETIES

All Colors. Pkt. 15c; oz. 75c. Bonnie Ruffles. A beautiful salmon-pink.

Blue. Soft mid blue shade.

Crimson. Rich satiny crimson, ruffled and waved. Long stems.

Exquisite Ruffled. Sparkling salmoncerise; large ruffled.

Rose. Soft rich rose, large and ruffled.

White. Pure white.

Ruffled Mixed.

STOCKS, Gilliflower (a) Grp. 4

These popular flowers are easily grown, are so highly fragrant, and of such great beauty that they deserve a place in every garden. The Early Giant Imperial class are half-hardy annuals. Stocks are biennials, but if sown in early spring will bloom the same year. They are also valuable for winter forcing. In California Stocks are popular winter annuals.

Double Large Flowering Dwarf Ten Weeks. A wonderful strain for bedding. Pkt. 10c.

Beauty of Nice. It follows the Ten Weeks class in season of bloom. The plants are pyramidal in shape, branching above the base. Excellent for bedding and cutting. Height, 16 inches.

Finest Mixed Colors, Pkt. 10c.

GIANT IMPERIAL. Long stems and imposing spikes of large flowers make this the outstanding variety. It is about as early as Beauty of Nice and resembles it in hab't, except that the plant is less spreading and taller. Height, 2 feet.

Yellow (Buttercup). Pkt. 10c.

Blood Red. Pkt. 10c.

Rose, Pkt. 10c.

Lavender. Pkt. 10c.

White. Pkt. 10c.

Finest Mixed Colors. Pkt. 10c.

EVENING SCENTED STOCKS

The flowers are small, mauve colored, similar to the Virginian Stocks but are delightfully fragrant toward evening. They are especially sweet after a rain. Matthiola Bicornis (p) Grp. 5. Pkt. 10c.

GIANT WAVED SWEET PEAS CHOICE SPENCER MIXED

This mixture is grown from a special formula which has been built up and perfected during many years. It contains over forty of the very best standard varieties of the most recent introductions, all waved and giant flowering. Pkt. 15c.

CULTURE OF SWEET PEAS

Sweet Peas are deep rooting and heavy feeding plants. We recommend a trench to be dug about 18 inches deep and 18 inches wide. In the bottom fork in about 6 inches of well-rotted manure. Fill in with soil in which is mixed a liberal quantity of well-rotted manure.

The actual sowing is done in a shallow trench 6 to 8 inches deep. Cover the seeds with 2 inches of soil and press firmly. The balance is filled in as the plants grow, thus establishing deeper roots than would otherwise be possible. Use one ounce of seed to 20 feet of the row and later thin out so that the plants will be 4 to 5 inches apart.

If flowers are kept picked and seed prevented from forming more and better bloom will be produced. Avoid overhead watering as it causes the flower buds to

Time of Sowing: Spencer varieties may be sown in early October and lightly mulched in winter. Fall sowing gives finer flowers and longer stems and a slightly longer period of bloom.

In California, Early Flowering varieties are sown about August 1 and throughout the winter months. If sown in August they will bloom by November. Keep the surface of the bed cool by using a light mulch.

STRAWFLOWER or **IMMORTELLE**

HELICHRYSUM (a) Grp. 2. The finest of all Everlastings. They make unusually fine winter bouquets if cut when partially opened and dried slowly in a dry place, heads downward to keep the long stems straight. The centers of the double pompon-like flowers are nearly covered by the stiff overlapping petals. wide range of brilliant and soft colors. Height, 2 to 3 feet. Finest Mixed. Pkt. 10c.

SUNFLOWER Helianthus (a) Grp. 2

Sun Gold. New. Large double flowers of brilliant golden yellow Free flowering. Pkt. 10c.

Red Sunflower. Tall single flowered variety with bright red blossoms. Pkt. 10c.

SWEET SULTAN Centaurea (a) Grp. 2

These beautiful long stemmed flowers with their soft velvety heads make very enchanting bouquets. They measure 2 to 2½ inches across while the entire plant stands about 2½ to 3 feet tall. You can grow them readily in any garden soil, and your friends are sure to admire them. Mixed. Pkt. 10c.

SWEET WILLIAM Dianthus Barbatus (b) Grp. 5

A well known, attractive, free-flowering hardy biennial, producing a splendid effect in beds and borders with their rich and varied flowers. Height, 10 to 20

Single Varieties. Mixed Pkt. 10c. Double Varieties. Mixed. Pkt. 10c.

WALLFLOWER Cheiranthus (Grp.5)

English Walaflower (p) Spring blooming low erect perennial, in appearance much like stocks but flowers include yellow. yellow-brown, red and almost black. Sweetly fragrant. In mild climates plant in fall for early spring bloom and where winters are severe they should be carried over in a frame and set out early in spring. May be sown early in March for bloom the first year but the former method gives better flowering plants. Pkt. 10c.

Siberian Wallflower (Cheiranthus Alloni) (b). This unusual little plant deserves a place in your rock garden or low border. spikes bear numerous fourpetaled flowers of dazzling rich orange. Flowers the first season from seed and when established will bloom all summer. Height, 1 foot. Single. Pkt. 10c.

ZINNIA (a) Grp. 1

One of the most showy and satisfactory of our hardy annuals for beds, mixed borders and for cutting purposes. Easy to grow in any good garden soil. They commence flowering early in summer and continue until frost.



ZINNIA CALIFORNIA GIANTS

SUPER CROWN OF GOLD, Pastel Tints. The finest large-flowered Zinnia, with large well formed flowers. Contains a wide range of pastel shades, including soft yellow, old gold, light pink, various shades of salmon, peach, and buff, cerise salmon, white, and cream, each petal overlaid at the base with deep golden yellow. Flowers are borne profusely yellow. Flowers are borne profusely throughout the season on strong, robust plants. Mixed shades. Pkt. 10c.

DOUBLE DAHLIA FLOWERED. 21/2 feet. Enormous double flowers are produced on robust branching plants. The flowers usually have slightly hollowed center ringed with small tubular florets. Crisp, fresh appearance

Dream. Deep rosy lavender. Pkt. 10c. Exquisite. Light rose, deep rose centers.

Golden Dawn. Golden yellow. Pkt. 10c. Illumination. Deep self rose. Pkt. 10c. Oriole. Orange and gold bicolor. Pkt. 10c. Polar Bear. White. Pkt. 10c.

Scarlet Flame. Bright scarlet. Pkt. 10c. Will Rogers. Brilliant scarlet. Pkt. 10c. Mixed. Pkt. 10c.

RED RIDING HOOD. 1 ft. of compact form covered the entire season with double scarlet flowers not over an inch across. Effective in borders. Pkt. 10c.

CALIFORNIA GIANTS. This variety is taller than the Dahlia flowered type, 3 to 4 feet high, with long stems which make the flowers fine for bouquets. The blooms are large, flat and very graceful. Finest Mixed Shades. Pkt. 10c.

FANTASY. A new Zinnia type. Shaggy, medium sized flowers. Plant 2½ to 3 ft. high. Free bloom.ng. Excellent cutting. Wildfire. A rich, dazzling scarlet. Wildfire adds a distinct note of color and cheerfulness to the garden and will enliven any home when used in flower arrangements. Plants neat in habit, strong growing, and very free blooming, 2½ to 3 feet in height; coming into flower 45 to 50 days after seed is sown. Pkt. 10c.

DOUBLE LILLIPUT. 12 inches. A charming dwarf which is excellent for low borders or edgings. The plants are of tidy hab t and produce a bounteous supply of very double pompon flowers about 1½ inches across. The colors are bright. Mixed. Fkt. 10c.

LINEARIS. This little dwarf variety of Zinnia is most unusual and interesting. The flowers are single and of a lovery shade of golden orange, with a del.cate lemon yellow stripe through each petal. Blooms are produced in great profusion. Height, 8 to 10 inches. Pkt. 10c.

VERBENA (a) Grp. 4

One of the most popular garden annuals for beds and massing and for a gorgeous display during the summer months. Cannot be excelled, commencing to flower in July and continuing until frost. Height, 6 to 8 inches.

Floradale Beauty. A giant hybrid, the flowers varying from bright rose-pink to deep rose-red of exceptional brightness. Individual florets of perfect form, fully rounded, and average 11/4 inches across; heads 4 to 5 inches across. Pkt. 15c.

Hybrid Grandiflora Giant. Mixed. Very large flowers in lavender, white, pink and rose-red. Pkt. 10c.

VIOLA, Tufted Pansies (a) Grp. 4 Waller Franklin Formula Mixture. This water Frankin Formula Mixture. This blend of bright gay colors far surpasses any mixture of Violas we have seen. Bright shades of self colors of red, yellow, blue, and apricot combined with many shades which are blotched, undoubtedly make these Violas a supreme mixture. Plat 10c. mixture. Pkt. 10c.



LILLIPUT ZINNIAS

Lawn Seed



KNOX'S LAWN GRASS SEED

The Best All-Purpose Lawn Grass Seed. Price, 1 lb. \$1.00

A wonderful mixture that is the result of years of experimenting. It is especially prepared by us from the highest quality seeds that can be produced. It makes a smooth, green, velvety lawn with a thick bottom, free from common grasses which are inclined to produce clumps or knots. Only the very finest varieties of the most suitable grasses for making an even, thick turf are used in this mixture. The various grasses composing this well-balanced blend are fine-bladed and deep rooting, sure to produce the best results under average conditions of soil and climate. It is all plump, heavy seed free from chaff or weed seeds. Sow 1 pound for a plot 10 by 20 ft. (200 sq. ft.); 100 to 150 lbs. of seed are required to sow one acre.

Ask for Prices on Other Lawn Seeds

Shady Lawn Mixture

Composed of grasses most suited for growing in heavily shaded locations. A splendid mixture. It is also satisfactory in light shade. 1 lb. \$1.00.

Pacific Mixture

Used exclusively on the College of the Pacific campus. A very hardy, stronggrowing mixture. Will stand extremely hard use such as playground or back yard. Considerably coarser than Knox's Lawn Mixture, 1 lb. 75c.

Kentucky Blue Grass

Most widely used of all lawn grass seeds. Used in all mixtures. Knox's Quality is the finest quality obtainable, being as near weed-free as it is possible to make it. Knox's Quality—1 lb. 95c.

White Dutch or Lawn Clover

(Trifolium Repens.) This is valuable for pasturage as well as for lawns; it succeeds where other clovers and grasses fail, and it seldom dies out. It can be sown at all seasons, although early spring is best. Lb. \$1.10.

Seaside Bent

(Agrostis Maritima.) Also often called Coos County Bent because most of the seed is grown in Coos County, Oregon. This is a true creeping bent, and makes a very smooth, uniform lawn. Extreme care must be taken in purchasing this seed, as there are so many swamp grasses and other weed seeds in the district where the seed is grown. Our stock of Seaside Bent is carefully recleaned in our own specially constructed seed cleaning plant, and is extreemly pure and free from weed seeds. Lb. \$1.75.

Astoria Bent

This variety is often called Golf-a-Lawn Bent. It is a very desirable type of grass for golf course putting greens and fine lawns, as it makes a beautiful, thickly matted, deep green turf. It holds its color exceptionally well and is an underground creeper. Our Astoria Bent is unusually clean and free from weed seeds. Lb. \$1.75.

Poa Trivialis

An ideal shade grass. Finer and softer than Kentucky Blue Grass. Lb. \$1.55.

HOW MUCH SEED?

You can figure how much lawn seed you need from the table below, which is compiled on the basis of 1 pound of seed for 175 square feet of lawn.

Area in sq. ft.		Size of area	Lbs. seed required		
250		10x 25		11/4	
625		25x 25		$3\frac{1}{2}$	
1250					
1875		25x 75		11	
2500		25x100		14	
3750		50x 75		22	
5000		50x100		28	
5625		75 x 75		$31\frac{1}{2}$	
7500		75x100		42	
10000		100 x 100		56	

Pacey's Rye Grass

Produces quick results. Somewhat coarser than blue grass, but very hardy. Sow thick to keep it from bunching or stooling, 1 lb. 35c.

Bermuda Grass

Makes a very heavy sod. Hard to control, as it creeps all over the garden. Frost turns it brown in winter, but does not kill it. 1 lb. 75c.

Red Top

Used mostly in mixture. Prefers a moist, rich soil, 1 lb. 55c.

Chewings Fescue

Produces a mat-like turf of a brownish green color. The leaves are fine, needle-like and bristly. Resists hard wear. 1 lb. \$1.15.

How to Have A Good Lawn

A well made lawn will last a long time, so it pays to be thorough in preparing the soil.

Drainage is the first consideration. Water logged soil will not support a good turf. Tiling is one way to promote good dra nage; another is to work liberal quantities of sand and gravel into the subsoil

NOTICE—All prices in this catalog are subject to change without notice. All sales are made subject to the usual disclaimer of the seed trade that appears on the order blank.



Topsoil is important. In many gardens the site for the lawn is covered to a considerable depth with subsoil from the basement excavation. If you cannot prevent this the next best thing to do is to have the lawn site covered with a 6-inch layer of good loam. Into this top layer of live soil work garden compost, peat moss and commercial fertilizer.

At this point it is a good idea to rake the ground roughly and water it well to bring up the weeds. When they come up chop them off. Repeat the watering and hoeing until the weeds have been considerably reduced in numbers.

Roll the ground before seeding, to prevent it from settling unevenly, and then rake the surface lightly. Sow the seed so as to cover the ground thoroughly, and then cover it lightly with soil. Roll again so as to press the seed in firmly. If you have no roller, use boards and tramp on them so as to pack the ground firmly, but a roller is preferred.

Grass seed will germinate in from 8 to 15 days, according to the weather. If a lawn is made during the summer, the ground should be covered lightly with peat after the seed has been rolled, so as to retain the moisture. New lawns should not be allowed to dry out, not even for a half day. For the first 15 days the lawn should be watered twice a day if necessary. A lawn should be fertilized after the first cutting, and at least twice a year. Water well after applying.

WARNING: Do not use the so called rotted manure which is being sold to inexperienced gardeners. It may be full of wild clover and other weed seeds and pests. It is expensive when you take into consideration that a few pounds of good fertilizer is equal to a sack of manure. If you want a moisture-holding material for top-dressing use peat. We recommend the use of peat.

Important Ordering Suggestions

Free Transportation on All Flowers and Vegetable Seeds in Packets, Ounces or ¼ Pounds.

All seeds quoted in this catalog are shipped by Parcel Post, all transportation and packing charges are paid by us. C.O.D. and money order return fees are not considered as transportation charges and, therefore, must be paid for by the customer. Avoid them by sending remittance with order. Bulk seeds, such as Peas, Beans and Corn, in quantities, are shipped to your nearest express or freight office, transportation collect. If you wish them shipped by Parcel Post, please send necessary postage.

SHIPPING ORDERS. When goods are to be shipped by Freight or Express, give plain shipping directions; otherwise we use our best judgment in routing. Goods on which we pay transportation are shipped at our option.

SEND MONEY. Remittances should always accompany the order. Remittances may be made at our risk by any of the following methods (1st and best) Post Office Order; (2nd) Bank Draft; (3rd) Express Company Money Order; (4th) Cash by Express in amounts not less than \$50; (5th) Registered Letters.

WE GUARANTEE the safe arrival of vour order.

Did you ever try a Cover Crop?

Some portions of your vegetable garden will probably be unused during part of the year. It's a good idea to sow a quick growing covercrop such as a combination of winter oats and vetch, or winter oats and rye, in these idle spaces. When planting time arrives turn your cover crop under to obtain the benefits of the humus and plant food stored in the green plants. If you have never tried cover cropping you'll be surprised at the results. Even stiff clay soils are noticeably improved by the use of a cover crop.





VEGETABLE SEEDS

ASPARAGUS

1 oz. to 100 ft., 4 lbs. per acre.

When starting an asparagus bed from seed it is advisable to soak the seed for 24 hours before planting. This makes germination more rapid and certain. Sow in spring in rows about 18 inches apart, allowing 15 to 20 seeds to the foot. Cover with 2 inches of soil. The plants will be ready to set in a permanent bed the following spring.

Mary Washington. The most extensive grown variety. Large green spears with tight, purple-tinted tips, of fine quality. Heavily productive and very uniform. Pkt. 10c; oz. 25c. (FZ)

BEANS

Bush, 1 lb. to 150 ft., 50 to 60 lbs. per acre. Pole, 1 lb. to 150 hills, 30 to 35 lbs. per acre. Lima, 1 lb. to 150 ft., 30 to 50 lbs. per acre.

Bush, Green Pod

Prices: Pkt. 10c; ½ lb. 20c; 1 lb. 35c. Baccicia. 55 days. A heavy producer with pods up to 6 inches in length. Stringless. An excellent canner. Pkt. 10c. Bountiful. 48 days. Very desirable home and market garden sort; particularly valuable for early shipping. Plant large, thrifty, prolific. Pods clear light green; 6½ to 7 in. long, over ½ in. wide, flat, % in. thick; fleshy, very slightly fibrous, strictly stringless, brittle and tender. Seeds 65 per oz.; solid straw yellow. Fkt.

Dwarf Horticultural. Particularly desirable green shell and snap bean for home and market garden. Plant medium high, thrifty and productive. Pods dark green. (53 days).

Improved Stringless Green Pod. High quality for home and market garden. Plant large, thrifty, heavily productive. Pods medium green, 5½ inches long, almost ½ inch wide and equally thick. Very fleshy, strictly stringless, fine grained, tender. Seeds coffee brown. 53 days.

Tendergreen. A bush bean, of utmost value. The plants make a strong and vigorous growth. They are well branched and carry a great quantity of beautiful light green beans. The pods grow 6 to 7 inches long. They are round, extremely meaty, and tender. Even when fully grown they are absolutely stringless. Ripen in 54 days. (FZ)

"Greeze Your Garden"

You can enjoy the goodness of your own garden fresh vegetables the year around by freezing them. No other method of preserving can give you more appetizing and fla-vorful vegetables for your table. The letters (Fz)

indicates the best varieties to freeze.





Pencil Pod Black Wax

Bush, Wax Pod
Prices: Pkt. 10c; ½ lb. 25c; 1 lb. 40c.
Average maturity 52 days from seed.

Black Wax, Pencil Pod. Very desirable for home and market garden and for truckers. Plants large and thrifty. Heavily productive over long period. Pods handsome bright yellow, 5½ to 6 inches long, % inch thick, cylindrical; very fleshy, stringless, brittle, fine grained, and tender. Quality unexcelled. Seeds black.

Kidney Wax, Round Pod (Brittle Wax). Valuable for home garden and canning. Plants are erect, medium large, prolific. Handsome pods of waxy light yellow, 5½ to 6 inches long, thick and round. Very fleshy, brittle, strictly stringless and without fibre. Seeds white with brownish block over ish-black eve.

Golden Wax, Top Notch. Blight resistant. A splendid home garden and canning variety. Plant small, productive. Pods very attractive; golden yellow; 4½ to 5 inches long, ½ inch wide, thick, oval; fleshy, brittle, stringless. Seeds white, splashed with violet, carmine and purple.

Pole Beans

Prices: Pkt. 10c; ½ lb. 20c; 1 lb. 35c. Mature in 75-80 days.

Biue Lake or Improved White Crease-back. Splendid snap bean for home garden and early market. Good climber, heavily productive. Pods light green, 5½ inches long, ½ inch wide, almost as thick; nearly stringless, very fleshy, brittle, tender. Seeds white; excellent for

Kentucky Wonder. The oldest favorite of all pole beans should be in every garden. The dark green pods are round and curved, measuring 9 to 10 inches; they are stringless when young. Seed light brown.

Kentucky Wonder Wax. An early and hardy bean somewhat resembling the Kentucky Wonder except in color of pods which are light yellow and broader. If a wax podded bean is desired this is the one best variety to plant. Seed oval, flattened, somewhat shriveled, dark brown.

Oregon Giant. We highly recommend this variety to Northwest home gardeners. It keeps producing until killed by frost. Large, fleshy pods, 10 to 12 inches in length, stringless, light greenish yellow, splashed with red. A very tasty bean that requires very little care. Pkt. 10c; ½ lb. 30c.

Potomac. Six inches long, slender and round, this stringless, meaty bean is a good climber and heavy producer. The snap beans are excellent for home or market.

Tall Horticultural. The pods when young are of excellent quality and make fine snap beans. They measure 5 to 6 inches long and are stringless. The dried beans are grown extensively for winter use. They are large, of a light fawn color speckled with dull red. Highly recommended as a baking bean.

Lima Beans, Bush

Prices: Pkt. 10c; ½ lb. 30c; 1 lb. 50c.

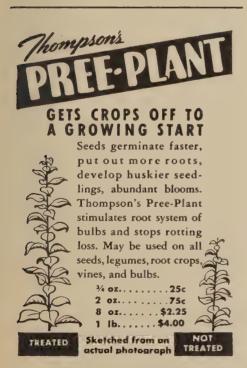
Baby Potato. All-America Silver Medal Winner for 1940. Prolific; excellent flavor. Good for produce market as well as canning and quick freezing. Seeds small and thick, of bright green color when fresh, and similar in flavor to Fordhook.

Burpee's Improved Bush. Plants large, heavily productive. Pods large, 4½ to 5 inches long. Usually contains 4 large, thick beans. Dry beans large, flat, greenish white. Mature in 75 days.

Cangreen. All-American Selection. Honorable mention 1943, 68 days to maturity. In all other respects resembling the Henderson Bush Lima, Cangreen is notable for the green color of the fleshy part of the seed in the dry stage. Attractive for canning, either commercially or in the home. Yields a prolific crop.

Lima Beans, Pole

Oregon Pole Lima. Proven over many years to be well adapted to our cool Northwest climate. A strong, vigorous grower, bearing continuously until frost. Pods are at their best when yellow.



BEETS

1 oz. to 100 ft., 4-6 lbs. per acre.

Seeds should be sown at the rate of 1 ounce to 100 feet of row. The rows should be spaced 14 to 24 inches apart. Work the soil well and plant the seeds about an inch deep. A rich sandy loam is most favorable, but nearly all types of soil will produce beets if sufficiently fertilized and properly tilled. All varieties of beets seil for: i kt. 10c; l oz. 25c.

Detroit Dark Red. The standard of excellence in table beets for home and market garden, for shipping, and for canning. Tops uniform, small, slender, erect. Roots globe shaped; symmetrical, with small collar and small tap-root. Very dark blood red. Mature in 52 to 55 days.

Early Wonder. Very desirable for home and market garden. Tops small. Root flattened globe shape and small collar and tap-root. Dark purplish red. Flesh deep purplish red zoned a lighter shade. Mature in 50 to 55 days.

Crosby's Egyptian (Original Strain). 50 to 55 days. Splendid home and market garden sort. Tops medium in size; collar small. Root flattened globe-shape, with small tap root; very dark purplishred. Flesh deep purplish-red zoned with a lighter shade; crisp and tender.



Beet, Detroit Dark Red

MANGEL (or Stock Beet)

1 oz. to 100 ft., 6 to 10 lbs. per acre.

Valuable as stock feed. Plant early in the spring in rows 2½ feet apart. The seeds should be 1 inch apart in the row and covered by 1½ inches of soil firmly pressed down. Cultivate frequently. When the plants are 3 inches high, begin to thin until the roots are 10 inches apart. All varieties of mangels: 1 oz. 25c; ¼ lb. 75c.

Danish S!udstrup. Very high yielder. Roots long oval, orange colored; flesh white with faint yellow tinge.

Giant Half Sugar. This variety is one of the favorites among the dairymen and hog raisers. It is very sweet and nutritious, as it has a higher sugar content than the ord.nary mangel.

Mammoth Long Red. Superior to strains offered as Norbiton Giants, Colossal, Monarch, etc. Roots very large; long spindle shape, straight and thick; grow one-third to one-half out of ground. Light red; flesh white tinged with rose.



Broccoli

BROCCOLI

½ oz. to 100 ft., 4 oz. per acre.

This is similar to cauliflower in color, character of foliage, form, and size of heads. It requires a long growing season and is especially suited to Pacific Coast states. Pkt. 10c.

Italian Green Sprouting. This vigorous plant is entirely different from the white heading sorts. Cultivated like cabbage, it bears a succession of sprouting heads which, if kept cut, will be replaced by others for 8 to 10 weeks. Each sprout, about 5 inches long, ends in a small head of dark green buds. It is one of the most delicious green vegetables.

St. Valentine. Standard market variety for March shipment. Plant large. Heads large, solid, white, and very well protected.

BRUSSELS SPROUTS

 $\frac{1}{2}$ oz. to 100 ft., 4 oz. per acre.

The small shoots, like miniature cabbages clustered around a stem, are the valuable part of this unique member of the cabbage family. They are successfully grown wherever conditions are favorable for late cabbage and require the same method of culture. They mature best in the autumn after the weather becomes cool. Pkt. 10c.

Dwarf Improved. Plants dwarf and compact, 20 inches tall. Very uniform; stem well covered with firm, round cabbage-like balls 1½ to 1½ inches in diameter mature in succession. Pick as needed.



Brussels Sprouts

Whatever Your Gardening Needs, Consult Us We Can Help You

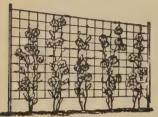
HAND TOOLS FERTILIZERS **INSECTICIDES**

SPRAYERS

GARDEN HOSE
PET SUPPLIES

We Carry a Complete Line of GARDEN TOOLS AND SUPPLIES

WEATHERIZED TRELLIS NETTING

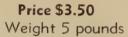


Ideal Support for SWEET PEAS, GARDEN PEAS, POLE BEANS, CUCUMBERS, TOMATOE3. Grows finer, larger flowers and vegetables. Hung with ease in 5 minutes; no fuss or bother. Use instead of string or wire. (Wire in sun burns delicate tendrils.) Doesn't rot like string—last several seasons. In 3 sizes: No. 1, 60x70 in., 65c; No. 2, 60x96 in., 85c; No. 3, 60x180 in., \$1.25. Postpaid.

TRAIN-ETTS

THE CYCLONE SEED SOWER

A machine which should be on every farm. It is light, strong and durable, and with ordinary care will last a lifetime. It will sow clover, corn and grass seeds and fertilizers of all kinds perfectly even, and any desired quantity per acre by following the simple directions on every machine.





NOW FOR THE FIRST TIME,

it is possible to control major garden pests with one single, effective product

ND OPEST

END o PEST as its name implies, gives you quick control of the ravaging enemies of vegetables, flowers and shrubs. It is so simple to use, you'll gladly spend the few minutes necessary to prevent heavy infestation of pests in your garden.

END o PEST gives control of **all three** types of garden pests at once... does its effectively, quickly and economically. **END O PEST** can be used as a spray or as a dust. Either way, it is a "must" for every gardener . . . protects your investment in time, in work, in seeds and in plant food.

Packed in its handy, moisture-proof, refillable bellows-type applicator END o PEST is amazingly easy to use. Just break the seal and you're ready to wage victorious war on all types of garden bedevilers.

or, if you prefer, END o PEST May be mixed with water and used as a spray.

END o PEST is available in $\frac{1}{2}$, 1 and 2 $\frac{1}{2}$ lb. cartons, with handy spout-pouring tops for refilling END o PEST applicator or for use in other dust guns or sprayers.

Prices: 10 oz. Gun, 79c; 10 oz. Refill, 59c; 2 lb. pkg., \$1.50; 4 oz. pkg. 25c

CABBAGE

 $\frac{1}{2}$ oz. to 100 ft., 4 oz. per acre.

For plants of early kinds, sow seed in January under glass, and put out into flats about 2 inches apart. Transplant to open ground as early in the spring as the soil can be prepared, setting 1½ to 2 feet apart, in rows, which should be 3 feet apart. Cultivate frequently, and during dry weather water copiously. Late cabbage seed should be sown in drills in open ground during April and May, and transplanted in June or July. Fertilize heavily, using 400 pounds nitrate of soda per acre in three dressings, one-third when plants are set out, and two-thirds a month apart later. Pkt. 10c; 1 oz. 40c.

EARLY VARIETIES

Mature between 60-65 days.

Copenhagen Market. Distinctly and uniformly early. Splendid for early market and shipment; valuable as an early kraut variety. Plants small, compact, allowing very close planting. Stem short heads uniformly round; firm; 6 to 7 inches in diameter. Weight, $3\frac{1}{2}$ to 4 pounds. Interior clear white and of excellent quality. Mature in 66 days.

Early Jersey Wakefield. Extremely early variety, very valuable for home and market garden as well as for shipment. Plants very small and compact, allowing close planting; stem short. Heads firm and conical; usually 7 inches long, 5 inches thick near base; weight, 2 to 2½ pounds.

Golden Acre. The earliest round-headed cabbage; especially valuable for early market and shipping. Plants very small and compact; stem short. Heads uniformly round; firm, commonly 6 inches in diameter and weigh 3 pounds.

LATE VARIETIES

Mature in 90 to 100 days.

Danish Ball Head. This is the best late cabbage. The plants are medium sized with short stems. Heads large; flattened globe shape; becomes 8 to 9 inches across, 6 to 7 inches deep, and weigh 7 to 9 pounds. Very firm and solid; of excellent quality; keeps perfectly in storage until late spring. Pkt. 10c; 1 oz. 40c.

Late Flat Dutch. The best very large, late cabbage. Popular for home and market garden. A good keeper. Heads very large and flat, but deep; become 12 to 14 inches across, 7 inches deep, and weigh 12 to 14 pounds or more; firm, good quality.

Mammoth Red Rock. A sure cropper and used very extensively for pickling. The solid heads are borne on medium-length stems and are red throughout. Perfectly round, solid as a rock, and quite large. Often weighing 6 to 8 pounds each. The latest of the red cabbages.

Savoy. Enjoys great popularity on account of its tasty flavor which is more delicate than that of ordinary cabbage. The large round heads are somewhat flattened and very heavy. The deep green, crinkled outer leaves enclose the tender, light green heart. It matures late in the fall and will keep all winter.

CHINESE CABBAGE

Wong Bok. This exceptionally fine vegetable is rapidly growing in public favor. It resembles the Cos lettuce, forming long heads of crisp leaves. Very mild and pleasant flavored. Serve as a salad or cooked. Pkt. 10c; 1 oz. 50c.



CARROTS

½ oz. to 100 ft., 3 to 4 lbs. per acre.

Sow seed in light sandy soil, from April to July, in drills 1½ feet apart, covering the seed ½ inch deep. Thin out the young plants from 3 to 5 inches apart, according to size of variety. Cultivate freely and do not allow the soil to get too dry during hot weather. All varieties of carrots: Pkt. 10c; 1 oz. 35c; ¼ lb. \$1.00.

Chantenay. Flesh is a deep golden orange color, always smooth and fine in texture, very tender. Excellent bunching variety and preferred by market growers. Medium early. 72 days.

Chantenay, Red Core. A fine carrot. Flesh tender and sweet, reddish orange in color with the core indistinct and of about the same color as the surrounding flesh. Suitable for canning and table use. 72 days.

Danvers Half Long. Red core. The roots are a rich dark orange and because of its symmetrical shape—long and pointed—it makes an excellent bunching variety. It has proved over a period of years to be the most popular carrot, both with the grower and the shipper. Mature in about 75 days.

Improved Imperator. This carrot grows to a length of 7-8 inches with a shoulder diameter of 1½ to 1½ inches, making a smooth crown. Does not have undesirable side shoots; have a fine texture, and is good and sweet. Deep orange. In all respects it is very attractive for shipping purposes. 77 days.

French Forcing (Earliest Short Horn). 60 days. Valuable for forcing and for out-of-door culture for early market. Tops small. Roots reddish orange: small, globular, become 1½ inches in diameter; flesh reddish-orange, of high quality. Pkt. 10c.

Long Orange. 85 days. A heavy cropper on light soils; much grown for stock. Roots scarlet-orange; 10 to 12 inches long, 2 inches thick at the top, tapered, pointed. Pkt. 10c.

Ox-heart or Guerande. 75 days to produce roots of good table size. Especially desirable for field culture on heavy soil; good keeper and much used for stock feed. Roots scarlet-orange; broad, blunt, heart-shaped; becomes 4½ to 5 inches long; easily harvested. Pkt. 10c.

CAULIFLOWER

 $\frac{1}{2}$ oz. to 100 ft., 4 oz. per acre.

The same methods that produce good cabbage will grow good cauliflower. The only great difference is that cauliflower heads must be protected from sunlight so as to make sure of the desirable white curd. Gather the tops of the leaves together loosely as soon as the heads begin to form. In shutting off the light, it is important not to cramp the heads. Pkt. 25c.

Early Snowball (52 days). The best for greenhouse forcing, early market, and shipping. Plants very dwarf. Heads snow white, deep, smooth and compact; about 6 inches across, weighing about 1½ to 2 pounds. The standard of excellence in cauliflower. (FZ)

CELERY

1/4 oz. to 100 ft., 4 oz. per acre.

Sow from February to May in drills 1 foot apart. Later, usually in June, transplant to rows 3 feet apart, setting plants 6 inches apart in row. Rows should be furrowed out so plants may be set 6 inches below the garden level. Later, soil may be banked against rows for blanching, even so-called self-blanching varieties need the cool, moist soil to render the stalks crisp and tender, but this should not be done until a few weeks before harvesting. One ounce of seed will produce five thousand plants. Pkt. 10c.

Giant Pascal. Matures late. Desirable for home and market garden. Plant large and compact. Leaf stalks long, thick and solid; of unsurpassed rich. nutty flavor.

Golden Yellow Self-Blanching Dwarf. Standard market and shipping sort. Plants medium sized, stocky; 20 to 24 inches tall; leaf stalks thick, solid, blanch readily and of sweet, nutty flavor.

Golden Plume or Wonderful. Early and very desirable for home and market garden. Plants medium sized; stocky, full hearted and compact; with thick solid stalks which blanch readily and are of the finest table quality.

Utah or Golden Crisp. An excellent variety for fall use, maturing about a week or 10 days earlier than Giant Pascal. Plants sturdy, compact and exceptionally solid. Stems are broad but thick and well rounded. Of fine quality and rich, nutty flavor.

White Plume, Valuable for early market. Foliage green tinted white; stalks and foliage blanch very readily to snowywh.te.

CELERIAC

 $\frac{1}{4}$ oz. to 100 ft., 4 oz. per acre.

Sow seed at the same season and give same treatment as common celery. Transplant to moist, rich soil, in rows 2 feet apart and 6 inches apart in row. Give thorough cultivation. It is not necessary to earth up or handle the plants. After the roots have attained a diameter of 2 inches, they are fit for use. Fkt. 10c.

Large Smooth Prague. An improved variety of turnip-rooted celery producing large tubers of nearly globular shape and comparatively smooth surface.

CHERVIL

Curled. Similar to parsley, but of more delicate texture. Leaves bright, rich green; finely divided and curled; pungent, aromatic; used for garnishing and flavoring. Pkt. 10c.

CHICORY

1 oz. to 100 ft., 4 to 5 lbs. per acre.

Sow chicory when weather becomes warm and settled. Sow in rows at least 24 inches apart and thin to 3 inches between plants. Pkt. 10c.

Large Rooted or Coffee. Dried roots are roasted and used as a substitute for coffee. Mature in 4 to 5 months; are 12 to 14 inches long; 2 to 2½ inches thick at top; tapered.

Witloof or French Endive. One of the best and most attractive of salad vegetables. Seed sown in spring produces long, thick roots by November. To force for use, dig roots in fall and trim the leaves off an inch above the crown. Trench in a warm, dark place, covered with 6 or 8 inches of soil and a top layer of fresh manure. A handsome, compact cluster of blanched leaves resembling Endive result. They are tender and have a rich, mildly acrid flavor.

CHIVES

Allium Schoenoprasum. Small perennial of the onion family; readily propagated from seeds; leaves used in salads and for flavoring soups and stews; flowering plant is decorative. Pkt. 10c.

COLLARDS

Georgia, Southern or Creole. Non-heading form of the cabbage family very generally grown for greens in home and market gardens in the South. Plant 2 to 3 feet tall, erect, spreading, and with numerous large leaves; forms at the top a loose cluster or head of tender leaves. Pkt. 10c.



Celery

CORN

Sweet Corn, 8 oz. to 100 ft., 10 to 14 lbs. per acre.

Plant in rich, warm soil, in hills, 2 to 3 feet apart, in rows 3 feet apart for early kinds and 4 feet apart for late sorts. Make first sowing about the middle of May and continue fortnightly up to about the middle of July. Corn should be planted in blocks of at least 4 rows.

Hybrid

Fkt. 10c; ½ lb. 35c; lb. 60c.

Carmelcross. 79 days. Large, 8-inch ears, well filled with medium-yellow kernels. Good flavor and quality. Early. Plants 4½ to 5 ft. high.

Golden Cross Bantam (88 days). Very uniform in habit of growth, size, and maturity. The ears measure 8 inches long and they are closely set with 14 row of light yellow grains filled with delicious sweet pulp. Bears two ears per plant. Pkt. 10c; ½ lb. 35c; 1 lb. 50c.

Marcross (76 days). Stalks short but sturdy, highly resistant to bacterial wilt. Ears long, plump, abruptly tapered at tips; 10-14 rowed, with light cream-yellow medium-broad kernels of good quality. ½ lb. 30c; 1 lb. 50c.

Spancross (73 days). Very early, Well filled 6-inch ears of a medium yellow. Good quality. Plants grow 4 to 5 ft. tall.

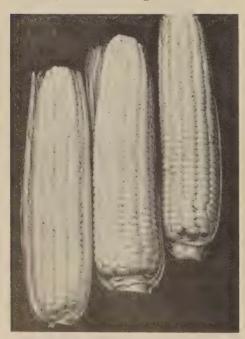
Open — Pollinated — Yellow

Pkt. 10c; ½ lb. 23c; 1 lb. 40c.

Golden Bantam. 8-row. 79 days. Slender ears $5\frac{1}{2}$ to $6\frac{1}{2}$ inches long have 8 rows of even golden kernels of good flavor. Very sweet. Popular with the home gardener and for commercial purposes.

Golden Bantam Improved (81 days). A selection from the original strain of Golden Bantam. Larger ears, more rows of kernels, greater production. Golden yellow, deep, wide, tender kernels with a fine sweet flavor. Particularly desirable for canners and market gardeners. Remains in table condition a long time.

Golden Early Market (77 days). One of the best extra early yellow varieties for home and market garden. Ears have strong husks and 8 to 12 beautiful tender rows to each ear. Kernels golden yellow, medium, sweet and of good flavor.



Corn



CUCUMBER

1 oz. to 100 ft., 3 to 4 lbs. per acre. Mature in approximately 60 days.

Sow outdoor varieties early in spring, in hotbeds, and transplant to open ground when weather is suitable. For later crop, sow seed when weather becomes settled, in hills of 5 to 6 inches apart. They require a warm, rich soil, and should be watered liberally. Pkt. 10c; 1 oz. 35c; ¼ lb. \$1.00.

Boston or Chicago Pickling (59 days). An early pickling or slicing variety. Fruits weigh about $1\frac{1}{2}$ pounds and are 6 inches long and $2\frac{1}{2}$ inches in diameter.

Colorado or A & C. (68 days). An attractive variety for market gardens and for shipping. Fruit very dark green, cylindrical, round with a small seed pocket. Unusually free of striping at the blossom end.

Cubit. All-America Bronze Medal, 1944. Handsome, long, cylindrical fruits of dark green exterior, with crisp, white flesh and small seed area. Excellent for home and shipping. Pkt. 25c.

Davis Perfect (68 days). A splendid dark green variety, excellent for slicing and a good shipper. Very dark green, white spined. The color is retained a long time when pickled. Tapered somewhat at both ends. Seeds few.

Improved Long Green (67 days). This is a great improvement over the old strain of Long Green. The fruits are unusually handsome, being of good form and of a deep green color which is retained a considerable time after picking. 9 to 10 inches.

Lemon (65 days). Little cucumbers resembling lemons in both form and color and have a delicious and distinctive flavor. Fine for preserves or sweet pickles and considered superb as a salad. Prolific.

Gherkin or Burs. Of superior quality for pickles. Not a true cucumber. Very prolific; fruits are ready for pickling in about 60 days. Fruits pale green; prickly over entire surface. 1½ to 2 inches long; oval; uniform; seeds numerous and small.

EGGPLANT

1/4 oz. to 100 ft., 5 to 6 oz. per acre.

Sow in mild heat, about the middle of March, and transplant on June 1, setting the plants 2½ feet apart. Pkt. 10c; oz. 65c.

Black Beauty (80 days). The fruits of this variety are large and symmetrical. Retains its glossy black-purple coloring for a long time. This lasting quality makes it distinctly popular.

ENDIVE

1 oz. to 100 ft., 4 to 5 lbs. per acre.

Sow about the middle of April, in rows 1½ feet apart, and thin out to about 9 inches apart. Pkt. 10c; 1 oz. 30c.

Broad-leaved (Escarolle). Leaves long, broad, and succulent. Fine for winter salads and cooking.

Deep Heart or Improved Full Heart. Large, thick, dark green leaves with curled edges. Forms medium large head which blanches to light yellow. Deep, full, and compact heart.

Large Green Curled (Pink Ribbed). Outer leaves bright green, midribs tinged with rose. Center leaves blanch readily. Makes attractive salads. Vigorous and resistant.

KALE, Borecole

1 oz. to 100 ft., 4 to 5 lbs. per acre.

The culture is practically the same as that of late cabbage, but as the plants will withstand several degrees of frost. they can grow late into the fall. Many think kale best after the first heavy frost. Pkt. 10c; 1 oz. 20c; ½ lb. 60c.

Dwarf Green Curled Scotch (55 days). Plants have wire-spreading, finely curled blue-green plume-like leaves. Relished as a vegetable green and useful as an ornament.

Tall Green Curled Scotch (60 days). Hardy plants with leaves deeply cut. Curled at the edges, light green in color; very tender and finely flavored after touched with frost.

Jersey or Thousand Headed. Called Chicken or Cow Kale. Vigorous branching plant with enormous cabbage-like leaves. Relished by poultry and livestock as winter greens.

KOHL RABI

 $\frac{1}{2}$ oz. to 100 ft., 4 to 5 lbs. per acre.

The delicious flavor of this turnipshaped bulb combines both cabbage and turnip. As early in spring as possible. sow the seed in light rich soil in rows 11/2 feet apart. When plants are well established, thin to 6 inches apart in the row. I kt. 10c; 1 oz. 50c.

Early White Vienna (55 days). For forcing. The best table sort if used when the bulbs are 2 inches in diameter. It matures very early and produces medium sized light green bulbs with white flesh of excellent quality.

LEEK

Large American Flag. An early popular sort. Stems 8-10 inches long, 1½ inches thick; white, and attractive. Leaves large, medium green, drooping backward. Pkt. 10c; oz. \$1.00.

LETTUCE

½ oz. to 100 ft., 3 lbs. per acre.

Sow the seed in hotbeds during February until the middle of March, afterward transplanting into flats or cold-frames, leaving about 6 to 8 inches between the plants. As soon as weather becomes suitable, transfer to open ground and set out in rows 1 foot apart, leaving 9 inches between the plants in

Pkt. 10c; 1 oz. 40c; 1/4 lb. \$1.20.

Bibb Lettuce (57 days). Rather small heads used as forcing lettuce in the south. Leaves are smooth, dark green, south. Leaves are smooth, dark green, heart butter yellow. Excellent quality.

California Cream Butter, b. s. 75 days. Popular over the entire country, particularly with market gardeners.

Great Lakes (83 days). A heading variety of the Imperial type developed by U. S. Department of Agriculture and Michigan Experiment Station. Leaves large and well folded; ribs heavy. Shows considerable resistance to tipburn and ability to head under adverse conditions. Pkt. 25c.

Imperial No. 152 (Mature in 83 days). Medium large, solid and attractive heads. Well adapted for early fall planting and dependable in heading. Resistant to brown blight.



Lettuce

Imperial No. 847, b. s. The newest of the Imperial varieties resistant to brown blight. Crisp heading plants of medium size. Leaves smooth, thick, medium light green. Heads round, well folded. firm with low seed stalk. Pkt. 10c.

New York No. 515 Improved. A development from No. 12, matures slightly earlier. Resistance to tip-burn makes this lettuce ideal where hot weather pre-

LEAF LETTUCE

Pkt. 10c; 1 oz. 30c; 1/4 lb. 75c.

Black Seeded Simpson (45 days). A good non - heading or cutting lettuce with broad, light green, frilled outer leaves. Center leaves are almost white. Crisp leaves with a delicate flavor.

Grand Rapids. Very early. Hardy, disease resistant. The most widely used and best adapted variety for greenhouse forcing. Plants large, upright, compact, and handsome; bright solid, light green, large leaves with broad, much frilled margin. Very tender and sweet when grown under glass.

0ak Leaf. Shaped like an oak leaf. Stands up well in hot weather and does not turn bitter. $Pkt.\ 15c.$

Red Leaf Prize. An early non-heading sort, very desirable for home garden use. Plants of medium size, crisp and tender; color medium green with brownish-red edges on outer leaves.

MUSKMELON

1 oz. to 100 ft., 3 to 4 lbs. per acre.

In sections where the summers are short, seed can be planted indoors or in hot beds in small boxes. The young plants can be transferred to the garden when danger of frost is past. If practicable, spade in a liberal forkful of wellrotted manure at the bottom of each hill. The rows should be at least 6 feet apart and the hills 3 feet apart in the rows. In general, the culture is the same as that for cucumber. Pkt. 10c; 1 oz. 25c.

Cranshaw (96 days). A thick-fleshed melon with salmon color inside, golden green outside. Round at base, stem end pointed. Weighs 7 to 8 pounds.

Hale's Best Improved No. 36 (80 days). Fruits slightly oval, weighs 3 to 4 pounds. Flesh exceptionally thick, deep salmon in color, sweet, aromatic and of very fine quality. Uniform in shape.

Hale's Best, Jumbo Strain. An outstanding shipping variety. Fruits slightly oval, uniform. Flesh exceptionally thick, deep salmon in color; sweet, and of very fine quality. Has a delightful aroma. Ripe in 75-80 days.

Hearts of Gold (100 days). This popular medium sized melon follows the earlier varieties. It is fine to plant for succession as it ripens in about 100 days. The fruits are 5 to 6 inches in diameter. The smooth orange salmon flesh is exceptionally thick and fine flavored.

Imperial No. 45 (87 days). Extensively used because of resistance to downy mil-dew. Similar to Hale's Best but only faintly ribbed. An exceptionally good

Rocky Ford or Netted Gem (92 days). Fruits are small with rather large seed cavity, nearly round; no ribs, and heavily covered with hard gray netting. Flesh thick, green in color with gold tinge at the center. Juicy, spicy, and of good quality.



OTHER MELONS

Casaba (110 days). The casaba is a melon for the late season after the muskmelons are past. Fruits are medium large, globe shaped, weigh 6 pounds; outer color golden yellow, surface wrinkled. Flesh white, luscious and spicy.

Honey Dew (112 days). A very fine melon. Fruits large globular, weigh 5 to 7 pounds. Surface is smooth, hard, with practically no netting, creamy white. Flesh light emerald green, thick, ripening to the rind; juicy and tender, with a distinct sweetness not found in other melons.

Persian (115 days). A late, slow growing variety. Fruits globular; rind very dark green, netting fine but sparse. Flesh thick, orange-pink in color. Of a distinct and delicious flavor.

MUSTARD

 $\frac{1}{2}$ oz. to 100 ft., 4 lbs. per acre.

Seed may be sown from early spring to midsummer in rows 18 inches apart. Thin to 5 or 6 inches apart in the rows. The plants are in condition for use as soon as the leaves are the size of one's hand. Mustard runs to seed quickly, so that successive plantings are necessary for a continuous supply. Pkt. 10c; 1 oz.

Southern Giant Curled. The leaves are large, light green with a tinge of yellow, and much crumpled and frilled at the edges. The plant is upright or slightly spreading in growth. This variety is valued in the South for its vigor, hardiness, and good quality.

Mustard Spinach or Tendergreen. Strictly speaking it is not a variety of mustard. A quick growing plant from the Orient. Leaves oblong, broad, fairly smooth with light green center ribs. Slow to seed, resistant to heat and drought. The flavor combines that of spinach and mustard.



OKRA or GUMBO

2 oz. to 100 ft., 8 to 10 lbs. per acre.

Sow seed early in May, in rows 3 feet apart and 2 inches deep. As plants appear, thin out to about 1 foot apart. Pkt. 10c.

Improved Dwarf Green. Early. Short, thick pods.

Perkin's Mammoth Long Pod. Standard medium early sort for home, market garden and canning. Plants 4 to 5 feet tall; pods dark green, fleshy, tender: become 7 to 8 inches long, 1½ inches in diameter. Distinctly ribbed and tapered.

ONIONS

½ oz. to 100 ft., 3 to 4 lbs. per acre.

As early as soil can be worked in spring, sow the seeds thinly in drills 1 foot apart, and cover lightly, later thinning out to about 6 inches apart in the row. The soil must be well fertilized and be made very friable. In hot weather, water frequently. 1 kt. 10c; 1 oz. 75c.

Utah Sweet Spanish. A large, globe shaped brown onion, weighing 1 to 3 pounds. Small tops. Flesh mild and sweet. Good for slicing. Most popular marketing onion.

White Portugal, or Silverskin. A good second early white flat onion. It should be planted any time from November 1st until April 1st. It is a good keeper and desired for shipping. Also very excellent as green bunching onions. Under good cultivation the average diameter is from 4 to 6 inches.

White Bunching or Pickling. Excellent and one of the best for green onions. Crisp and mild, attaining a good size before bulbs form.

White Sweet Spanish (112 days). A very large onion with pure white flesh, similar to the Yellow Sweet Spanish. A good keeper. Globular with small neck.

Yellow Globe Danvers. An outstanding variety. Dependable, medium late, hardy, and excellent keeper; used for shipping and storage. Bulbs medium size, spherical, clear yellow, firm and solid with tough, clinging skins. Flesh white with slight yellow tone. Pkt. 10c; 1 oz. 75c.

Stockton Red. A very early onion. The seed is planted in August and transplanted in November and December. The onion will be ripe in June. Very mild.

Stockton Yellow Half Globe. The earliest yellow onion. Seed should be sown in open beds in August and transplanted in November. Onion will be ripe in June and July. Our strain is the pure local Stockton Yellow, and is not produced outside of San Joaquin Valley.



Onion, Sweet Spanish



Peas, Laxton's Progress

PEAS

 $1\frac{1}{2}$ lbs. to 100 ft., 90 to 180 lbs. per acre.

For first crop, round-seeded peas should be sown in the open ground as soon as it is fit to be worked; wrinkled varieties should be planted 2 to 3 weeks later. Frequent planting for succession, and a careful selection of varieties, will give an almost continuous crop of peas from June until frost. Sow peas in rows 3 feet apart and 1 to 2 inches deep. Rotted horse manure and wood ashes should be freely used in the preparation of soil for growing peas. Pkt. 10c; ½ lb. 20c; 1 lb. 35c.

FIRST EARLY VARIETIES

American Wonder. 59 days. Very important early dwarf variety for the home garden; the same as Nott's Excelsior. Vines 12 to 14 inches high; dark green; very productive. Pods medium green, 3 inches long, ½ inch wide; plump, straight, blunt ended; seeds medium small, squarish, wrinkled, green; interior green. Pkt. 10c.

Gradus (55 to 62 days). A very popular second early, large podded variety for home use and market. Vines 36 inches tall, medium green, stocky. Pods single, broad plump, pointed, medium green; contain 8 to 10 large, delicious peas. (FZ)

Laxton's Progress (60 days). A little earlier than other dwarf large podded peas, this variety is generally considered the best of its class. The blue green pods are often more than 4 inches long and contain 8 dark green peas of finest quality. The seeds are large, wrinkled green and cream. (FZ)

Little Marvel (64 days). Outstanding among dwarf peas for the exceptional quality and yield. Valuable for home garden and early market. Vines dark green, 18 inches tall, stocky. Pods single and double, dark green, blunt, plump, well filled with 7 to 8 tender peas.

MAIN CROP

Mature to pick in about 75 days.

Improved Stratagem. A superior late variety. Vines deep green, 26 inches tall, stocky and branching. Pods single and paired, wide, nearly round, straight, pointed, dark green. Contain 8 to 10 tender peas.

Tall Telephone or Alderman. A handsome, large podded variety. Unexcelled for home gardens, for local markets and for shipping. Bears immense crops. Wilt resistant. Pods single, very broad, plump, straight, dark green, pointed, contain 8 to 10 peas of highest quality.

Dwarf Telephone. Only about 2 feet tall, otherwise resembling Alderman. The pods are well filled with peas of the same good quality. It is an excellent variety to follow the early peas in the home garden. Seeds large, green, wrinkled.

PARSLEY

 $\frac{1}{2}$ oz. to 100 ft., 3 to 4 lbs. per acre.

Parsley seed is even slower than parsnip in germinating. It grows best in rich mellow soil and should be sown as early as possible in spring in rows 1 to 2 feet apart with a covering of not more than ½ inch of soil firmly pressed down. When the plants are well up, thin them 8 to 12 inches apart in the row. Pkt. 10c; 1 oz. 20c.

Extra Triple Curled (Moss Curled). This vigorous compact grower is one of the most popular varieties because of its deep green color and tightly curled leaves that look like moss. It is unusually decorative for table use.

PARSNIP

1 oz. to 100 ft., 3 to 4 lbs. per acre.

Sow the seed as soon as season will permit, in drills about 2 feet apart, and thin plants out to 1 foot apart in the row. The ground should be deeply trenched and well manured. Pkt. 10c; 1 oz. 25c.

Short, Thick. Roots short and thick, about 2½ to 3½ inches in diameter, and only 6 to 8 inches long at thickened part. Tops only about half the size of Hollow Crown. Roots full crowned and rounded on top; neck small. Fully a month earlier than Hollow Crown. Tender, sweet, easy to pull. Delicate flavor.

Hollow Crown, Thick Shoulder. This is the best and most popular variety in cultivation. The skin is smooth and white, while the flesh is tender. The roots grow 18 to 20 inches in length, but the first 8 inches from the top is the best part.



Parsley

PEPPER

1/4 oz. to 100 ft., 1 to 2 lbs. per acre.

Culture, soil and temperature requirements are about the same as for eggplant. A moderate dressing of Guano, poultry manure, or complete commercial fertilizer, hoed into the soil after the plants are 6 to 8 inches tall, will be very beneficial. Pkt. 10c; 1 oz. 75c.



California Wonder. Thickness of flesh alone, which is often % of an inch, places this sweet pepper above all others. It is crisp and juicy, too, without a trace of pungency. Vigorous growing plants bear a heavy yield of blocky fruits that become as much as 5 inches long and 4 inches wide.

Chinese Giant. Fruits are often 6 inches across and 4* to 5 inches deep. The flesh is moderatedly thick and very mild. Rich bright green when young, and bright cherry red at maturity.

Large Bell or Bullnose. A popular, early, sweet prolific sort. Small, erect plants. Fruits blunt; flesh of fine quality and mild flavor. Much used for stuffing.

Long Red Cayenne. This well known, medium early pepper is especially good for drying purposes. The fruit is 4 inches long and 1 inch thick, twisted and pointed. It is deep green when young and bright red when ripe. The flesh is strong and pungent.

Perfection Pimento. A splendid canning variety, adapted to home and market garden culture. Plants large, erect, prolific. Fruits heart shaped, very smooth; flesh exceptionally thick, sweet and mild.

PUMPKIN

4 oz. to 100 ft., 3 to 4 lbs. per acre.

Pumpkins are typically American, and pumpkin pie is one of our truly American dishes. They are less sensitive to unfavorable conditions of soil and weather than melons or cucumbers, but they are cultivated in about the same way. Pkt. 10c; 1 oz. 25c.

Kentucky Field or Dickenson. Fruits very large, flattened, furrowed. Skin creamy buff; flesh extremely thick, deep salmon-yellow and of good quality. Dependably early and heavily productive. Good for canning. Squash bug resistant.

Large Yellow or Connecticut Field. This sort is grown largely in the corn field for stock, but the flesh is moderately fine grained, highly flavored, and very good for pies. The fruits weigh about 20 pounds and are a rich, deep orange yellow.

Sugar or New England Pie. The earliest and best variety for pies. Fruits commonly 6 inches long and 8 to 9 inches in diameter; flattened, furrowed. Skin smooth, of a rich, reddish-orange color; rind hard. Flesh is thick and orange-yellow.

Winter Luxury. This variety is very popular for the home garden. The fruit matures in 75 to 80 days, weighs 8½ pounds, and is nearly round. The skin is light yellow with a russet tinge and finely netted; the flesh is rich creamy yellow, very thick, sweet, and finely flavored.

RADISH

1 oz. to 100 ft., 10 to 12 lbs. per acre.

For an early crop, sow in hotbed in January, February and March. As soon as ground is fit to be worked, sow seed in the open, in rows 1 foot apart. Pkt. 10c; 1 oz. 20c.

Crimson Giant. A favorite with home gardeners. Large globular root, 1 to 1½ inches in diameter, deep crimson, flesh firm.

Early Scarlet Globe. The earliest of all forcing radishes grown for market. Globular, uniform size, bright scarlet, white flesh, crisp and tender.

Early Scarlet Turnip—White Tip. This variety grows very quickly and is ready for picking in 25 to 30 days. Scarlet in color, turnip shaped, very crisp and of excellent flavor. One of the best varieties for the home gardener.

French Breakfast. A splendid variety for home use; oblong, bright scarlet, white tip. Grows about 1½ inches long and ½ inch thick.

Long White Icicle. Long slender roots which remain tender and crisp until mature. The small top permits close planting. Early.



Radish



Pumpkin

WINTER VARIETIES

Black Spanish Long or Round. A hardy, large, rather pungent variety for winter use. Keeps unusually well; is 8 to 9 inches long and 2 inches thick, slightly tapered. The skin is black and the flesh white and crisp. Round, about 4 inches in diameter.

Chinese White Winter (Celestial). Clear white and smooth; about 8 inches long, $2\frac{1}{2}$ to 3 inches in diameter. Square shoulder and blunt bottom. Flesh white, firm, and crisp; mild; not as pungent as most winter varieties.

Scarlet China Winter (Chinese Rose Winter). A large rose-colored variety from the Orient. Hardy and rather mild. The flesh is white, and very crisp. This variety is broadest at its base and is 4 to 5 inches long.

RUTABAGA, Swedish Turnip

1 oz. to 100 ft., 2 to 4 lbs. per acre.

The culture is the same as for turnip, but if anything, less exacting in care. Pkt. 10c; 1 oz. 20c; ¼ lb. 60c.

Improved American Purple Top (or Long Island Improved). The old, popular standard sort both for stock feeding and table use. Flesh yellow, solid and sweet. Is globe shaped, of large size, of fine quality.

SALSIFY, Vegetable Oyster 1½ oz. to 100 ft., 7 to 8 lbs. per acre.

The roots of this vegetable are appetizing and nutritious and the flavor is like that of oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will cause the roots to become irregular and branched. Sow early and quite deep, giving the general culture recommended for parsnips. Pkt. 10c; 1 oz. 50c. Mammoth Sandwich Island. Large and

strong growing with long, smooth, white, tapering roots. Less likely to branch than those of other sorts.

SPINACH

 $1\frac{1}{2}$ oz. to 100 ft., 10 to 20 lbs. per acre.

Sow in rows 16 to 20 inches apart and thin to 6 inches apart in the row when leaves are an inch wide. In the North, seed can be planted as soon as the ground can be prepared. In the South, spinach will winter over with little or no protection. Pkt. 10c; 1 oz. 15c.

Bloomsdale Improved Thick Leaf. The seed of this thick leaved variety produced the largest spinach. Growth is rapid and the leaves remain in good condition a long time. The medium green leaves are large, rounded, slightly crumpled, succulent, and tender. (FZ)

Nobel, or Giant Thick Leaved. Of rapid growth. The leaves are the largest of any type and keep well after picking; medium-green, rounded, slightly crumpled, succulent and tender. Excellent for the home garden.

New Zealand. Not a true spinach though similar when cooked. Thrives in hot, dry weather. The large, spreading plants have small, thick, pointed, deep green leaves, which can be picked repeatedly throughout the season.

Amsterdam Giant Prickly Winter. The leading variety in the prickly seeded varieties of spinach, being used by both the canners and the market gardeners. Plant is vigorous, leaves large, thick and of finest quality.

SQUASH

Vining, 1 oz. to 100 ft., 4 lbs. per acre. Bush, 1 oz. to 100 ft., 4 to 6 lbs. per acre.

Seed should be planted about the middle of May, in hills 4 feet apart for bush varieties, and 10 feet apart for the running sorts. Put 5 to 8 seeds in each hill; afterwards thin out, leaving 3 or 4 of the best plants. Pkt. 10c; 1 oz. 25c.

Banana. A late trailing sort, cylindrical and pointed at blossom end. A fine squash for pies. Free from fiber or stringiness. Flesh thick, deep yellow, dry, and of a sweet flavor. Slate-grey rind.



Squash, Summer Crookneck

Early Summer Crookneck. Very early, 60 to 65 days. The bushy plant is very productive. Fruits attractive, weighing about 2 pounds. The skin is distinctly warted and bears a bright yellow color, while the flesh is pale cream, firm, and tender. A very good sort for home planting.

Improved Hubbard. Large and of warty Hubbard type. Shell dark green, hard, moderately warted. Flesh light orange, very dark and richly flavored. One of the best winter squashes.

Table Queen or Danish. Small, dark green, acorn shape. Flesh deep yellow, dry richly flavored. Medium early. A good keeper. Easy to grow. Delicious when served baked whole. Before serving cut open and remove seeds.

"Top of the Market" SQUASH

This new Summer Squash deserves a place in every garden. It is truly a Squash worthy of the name, "Top of the Market". It has a distinct and pleasant flavor heretofore unknown in Summer Squashes. It is a cross between Early White Bush Scallop and Table Queen, retaining all the merits of the White Bush Scallop in that it is just as prolific, though a few days earlier. This is the first time in which the sweetness and keeping qualities of the Table Queen have been bred into a Summer Squash.

Umatilla Marblehead. Thick meated squash. Large, slate colored variety. Yields heavy.

White Bush Scallop. A popular variety bearing profusely small, rather flat, white squashes with a distinct scalloped edge. Is very early and has a fine flavor.

Zucchini or Italian. The favorite Italian squash. It should be eaten when quite young, 4 to 6 inches long. It is a delicious summer variety; very prolific, a few hills will suffice to keep the family well supplied the entire summer. (FZ)

Black Zucchini. Considered by many to be a better variety than the older type. Similar in all respects but dark green, smooth and cylindrical, without striping or mottling.

SWISS CHARD

1 oz. to 100 ft., 6 to 10 lbs. per acre.

Only the tops of this beet are used, like spinach, and the succulent stalks and midribs may be prepared in the same way as asparagus. The plants are cultivated like beets except that they should be thinned to 8 or 10 inches apart.

Lucullus, Dark Green. The fleshy crumpled leaves of this variety make very choice greens. Plant erect; stalks rounded and finely ribbed. Foliage a rich deep green. Pkt. 10c; oz. 20c; 4 oz. 60c; 1 lb. \$1.50.

Rhubarb Chard. A Swiss Chard that looks like Rhubarb. The leaf stalks are bright but delicate, translucent crimson; the rich color extends out through the veins into the dark green, heavily crumpled leaves. Different, tasty, delicious flavor. Easily grown, thrives everywhere. Pkt. 10c; 1 oz. 30c; 4 oz. 90c.

TOMATO

1/8 oz. to 100 ft., 2 oz. per acre.

In February or March sow seeds lightly in rows in greenhouse, hotbed, or window box, and when plants have reached a height of 3 inches, transplant in hotbeds. About June 1, set out in open ground, 4 feet apart, giving plenty of well rotted manure to each plant. Water freely during hot weather. To obtain the best results, trellises or stakes should be used. Pkt. 10c; 1 oz. 80c.

Break o'Day. 73 to 75 days. We offer a superior selection of this early wiltresistant, globe-shaped shipping sort. Plants heavily productive. Fruits large, scarlet; flesh firm and of good quality. Stock grown from seed obtained from United States Department of Agriculture.



Spinach



Squash



Swiss Chard

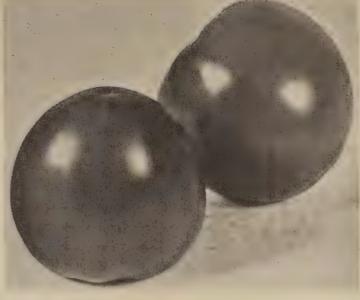
San Marzano (Italian Pear). Widely used used by canners for making paste. Thousands of acres of this variety were grown in San Joaquin Valley last season. It is a tremendous yielder. The fruits are ob-long or pear shaped, from 3 to 4 inches in length, bright scarlet. Recommended for canning for paste and pickles. Pkt.

Santa Clara Canner. A large, thick, flat, reasonably smooth canning type tomato. Fruits are deep scarlet, and vine growth heavy with good wilt resistance. This variety is adapted for canning only and is not suitable for shipment to market.

No. 133-6. A smooth, nearly globular tomato, larger than any other perfectly smooth tomato. It has thick skin and good texture and was primarily devel-oped for green shipment to Eastern markets. It has also been used to some extent by canners as a juice tomato, but the yield is not usually as heavy as Santa Clara Canner. Fruits are deep scarlet and good size. Pkt. 10c; oz. \$1.50.

Special Early No. 498. Is a first early, scarlet-fruited variety. The fruits are good size, smooth and deep from stem to blossom. It is undoubtedly one of the best early shipping varieties and is used very extensively in the Merced and very extensively Fresno sections.





Wilt Resistant Tomato, Improved Stone

Earliana Improved (65 days). One of the earliest scarlet fruited varieties. Medium size, almost seedless and solid. Vine open and spreading. A heavy bearer. Suc-

10c; oz. \$1.50.

Jubilee (72 days). Tomato of real merit; it is different from any other tomato of its class. Fruits are bright orange-yellow, globular and weigh about 6 ounces.

ceeds everywhere.

Marglobe (73 days). Excellent home garden variety and particularly valuable for shipping. Plants thrifty and heavily productive with a long bearing period. Fruits uniform deep scarlet; large; uniformly globe shaped; smooth, solid, and of distinct quality.

Ox Heart (90 days). Very popular late home garden variety. Fruits very large, often weigh 1 to 2 pounds or more; heart shaped, pink; flesh solid with very few seeds; of very mild flavor and very choice for salads. Pkt. 10c, oz. \$1.25.

Pearson, Improved (76 days). Primarily for canning but also of value as a shipper. Vigorous self-topping plants with ample foliage to protect the heavy set of fruits, which are medium large, semiglobe and of good red color. Pkt. 10c.

Pritchard (Scarlet Topper) (80 to 85 days). Wilt resistant and self-topping or self-pruning. Mid-season to late; prolific. Fruits globe-shaped, deep scarlet, smooth and solid. A good home and market variety and very popular for shipping. Pkt. 10c, oz. \$1.50.

Ponderosa (also known as Beefsteak). 85 days. One of the best for home use. Fruits deep purplish-pink; extremely large, commonly 9 to 12 ounces each; deep but flat; very fleshy with few seeds; of very mild flavor. Pkt. 10c, oz. \$1.25.

Stone (Norton Wilt Resistant). 85 days. Particularly valuable for the market gardener, trucker and canner. Heavily productive. Fruits uniform bright deep scarlet; large and flat, but deep, smooth and solid. Pkt. 10c.

SMALL FRUITED VARIETIES Used only for preserves, pickles and for decorative purposes.

Red Cherry. 75 days. Fruits small, round; rich deep red.

Red Pear. 75 days. Fruits 2 inches long; pear formed.

Yellow Pear. 75 days. Fruits 2 inches long; pear formed.

Yellow Plum. 75 days. Fruits oval, 2 inches long; clear deep yellow.

Yellow Husk or Ground Cherry. (Not a true tomato; sometimes called Strawberry Tomato.) 80 to 85 days. Used for preserving. Fruits borne singly; small, round; enclosed in papery envelope; of rich, sweet flavor.

TURNIP

1 oz. to 100 ft., 2 to 3 lbs. per acre.

Two pounds per acre in drills, 3 pounds broadcast. Turnips do best in highly enriched, sandy or light loamy soil. Commence sowing the earliest varieties in January, in drills from 12 to 15 inches apart and thin out nearly 6 to 8 inches in the row. For last planting or main crop, sow in July and August.

White Fleshed Sorts

Early Purple Top, Strap Leaved. Table size, 45 days. Very important home and market garden sort. Tops small, erect, compact. Roots flat, become 5 inches in diameter and half as thick; purplishred above and white below; flesh clear white, fine grained, mild. Pkt. 10c.

Early White Flat Dutch, Strap Leaved. Table size, 45 days. Important home and market garden sort. Tops small. erect, compast. Roots flat, become 5 inches in diameter and half as thick; entirely white; flesh fine grained and mild. Pkt. 10c.

Purple Top White Globe. Table size, 55 days; full size 70 days. The standard home, market garden and shipping sort for table use and splendid for field culture. Tops medium large, compact, strap leaved. Roots globular, smooth, bright purplish-red above, white below; become 5 to 6 inches in diameter; flesh white, firm, fine grained and tender when young. Pkt. 10c.

Seven Top, for Turnip Greens. Standard extremely hardy foliage turnip for table and forage use. Root woody and inedible; crown sends up numerous leafy shoots which are excellent for greens and for stock to graze on. Pkt. 10c.

Shogoin. A new, extremely useful sort. It is quick growing and supplies large edible strap leaves as well as smooth globular roots of superior quality. Already popular as a dual purpose variety; also very desirable because of its resistance to aphis or plant lice. Pkt. 10c.

Snowball. A very attractive medium size turnip of outstanding quality. Roots round, clear white both interior and exterior. Flesh fine grained, sweet and tender. Table size, 40 days. Pkt. 10c.

White Egg. Fine for home and market garden. Tops erect, fairly compact; cutleaved. Roots white, smooth, grow one-half above ground, egg-shaped, become 3 inches long and 2½ inches through. Flesh firm, white, fine grained, sweet and tender. Table size 55 days. Pkt. 10c.

Yellow Fleshed Variety

Orange Jelly or Golden Ball. Table size, 60 days. Splendid for table use. Tops small, cut-leaved. Roots globular, commonly 4 inches in diameter; skin smooth, orange-yellow; flesh yellow, firm, fine grained and of good quality. Pkt. 10c.

WATERMELON

A light, sandy soil, with good exposure to the sun is the best for watermelons. It should be prepared deep, but receive shallow cultivation. Hoe often and thoroughly. To get good, strong vines early in the season, form large, well-drained hills of earth, made very rich, about 8 feet apart. In these plant the seed as soon as the ground is warm and dry, dropping 6 seeds in the hills. Protect young plants from insects. One ounce to 30 hills, 2 lbs. to acre. When the plants are about 4 inches high thin out, leaving only four of the strongest plants to each hill

Angeleno. Medium early. Very popular home and market garden sort in California. Fruits medium to large; round, with blocky ends; very dark green; with strong rind; stand shipping well; flesh bright red, firm, of splendid quality; seeds black. Pkt. 10c.

Chilian. Medium early. Splendid home and market garden variety; very popular on the Pacific Coast. Fruits medium small, round, medium green with dark stripes; flesh bright red, of splendid quality; seeds black. There is a white seeded strain which is very similar. Pkt.

Florida Favorite. Medium early. Standard home, market garden and shipping sort in the South. Fruits large, uniform, oblong; light green with dark striping; rind tough; flesh bright red, of high quality; seeds white. Pkt. 10c.

Georgia Rattlesnake (Gypsy). Main crop. Standard home and market garden sort in the South; extensively grown for shipment. Fruits large, long, cylindrical, light green alternating with narrow, very dark green stripes; rind very tough; flesh rich scarlet red, of high quality; seeds clouded white with brownish marking. Pkt. 10c.

Kleckley's Sweets or Monte Cristo. Early. The most popular home garden sort; because of the thin, brittle rind it is not suitable for shipping. Fruits large, oblong, very dark green; flesh bright red, crisp, exceedingly sweet; seeds white. Very similar to Halbert Honey. Pkt. 10c.

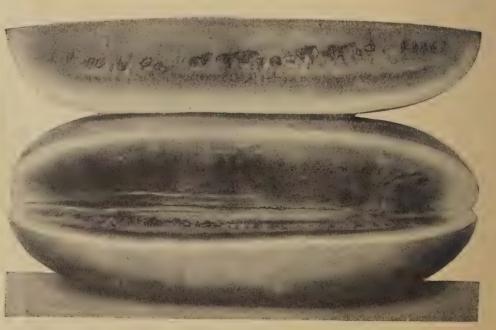
Klondike. Early. Unsurpassed in quality. Widely used in home and market gardens in California and increasingly in demand for shipping. Fruits oblong, with shallow ribs; pure green; flesh bright red, very sweet; seeds very small. Pkt. 10c.

Striped Klondike. The new Klondike created such a sensation last year. Has all the excellent qualities of the old Klondike plus many new ones. A tougher rind, does not sunburn, better shipper, no white streaks in the heart. It brought a premium wherever offered last year. Pkt. 10c.

Tom Watson. Main crop. The most widely grown melon for shipping; also splendid and popular for home and market garden use. Fruits very large, oblong, cylindrical, symmetrical, dark green with fine veinings of very dark green; rind very tough; flesh bright, deep red, cris pand sweet; seeds brownish. Pkt. 10c.



Turnips



Watermelon

AROMATIC, MEDICINAL and POT HERBS

Anise (Pimpinella anisum). Annual, 12 to 18 in. tall; chiefly grown for aromatic seeds used in flavoring. (Not the same as Florence Fennel, which is sometimes called Sweet Anise.) Pkt. 10c.

Basil, Sweet (Ocimum basilicum). Annual, 20 to 24 in. tall; entire plant has somewhat spicy aroma; used for seasoning; oil used in perfumes. Pkt, 10c.

Borage (Borago officialis). Coarse, hairy annual 2 feet tall; large, thick leaves used as pot herb and for flavoring; blue flowers highly decorative and used for garnishing; good bee plant. Pkt. 10c.

Caraway (Carnum carui). Biennial; produces rosette of leaves similar to carrot first year, and branched flowering stems 24 in. tall the second year; grown chiefly for aromatic seeds and volatile oil. Pkt. 10c.

Coriander (Coriandrum sativum). Annual, 15 in. tall; grown for seeds which are used in medicine and by bakers and confectioners for flavoring. Pkt. 10c.

Dill, Mammoth (Anethum graveolens). Annual, about 2 ft. tall; of strong aromatic odor and mildly pungent flavor; chiefly grown for seed clusters, used in making dill pickles. Pkt. 10c.



Fennel, Sweet (Foeniculum officinale). Perennial usually treated as annual; 3 to 4 ft. tall; of aromatic odor and sweet pungent flavor; seeds used for flavoring confections and medicines; differs chiefly from Florence Fennel in not having swollen leaf bases. Pkt. 10c.

Lavender (Lavandula spica). Half hardy perennial, 2 to 2½ ft. tall, of a delicate aromatic odor; flower stalks dried and used in perfume and to scent linens in the home. Pkt. 10c.

Marjoram, Sweet (Origanum marjorana). Tender, bushy perennial, 12 in. high, of aromatic odor and pungent flavor; chiefly grown for tender young leaves, used in seasonsing, Pkt. 10c.

Rosemary (Rosemarinus officinalis). Hardy perennial, 2 ft. tall, of fragrant odor and warm, bitter flavor; leaves used in seasoning and extracted oil used in perfumery. Pkt. 10c.

Sage, Broad Leaf (Salvia officinalis). Hardy, spreading perennial; 12 to 15 in. tall; of strong, pleasant aromatic odor and mildly pungent flavor; the most commonly used of all the herbs for seasoning. $Pkt.\ 10c.$

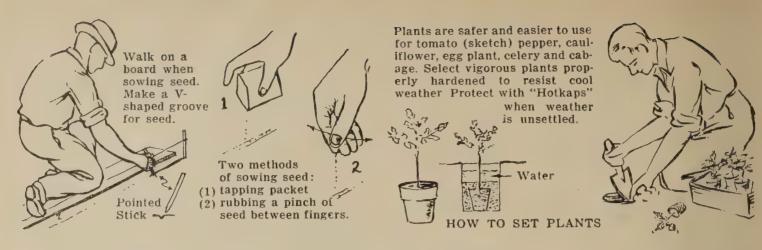
Savory, Summer (Satureia hortensis). Annual about 15 in. tall; entire plant aromatic; very popular for seasoning. Pkt. 10c.

Thyme (Thymus vulgaris). Hardy perennial; about 10 in. tall; of strong agreeable aromatic odor and pungent flavor; used in medicine and for seasoning culinary preparations. Pkt. 10c.



QUANTITY OF SEED AND SPACING FOR HOME AND MARKET GARDENS

THOUSE A DI VI	Seed Required	Seed Required	between	Distance Depth apart of		Seed Required	Seed Required		of
VEGETABLE	for 50 ft.	to sow an acre	rows inches	in row planting inches	VEGETABLE	for 50 ft.	to sow an acre	rows in row pla	nting chem
Artichoke, Globe		6 to 8 oz.	40 to 48	18 to 24 1	Kohl Rabi	1/4 oz.	4 to 5 lbs.	14 to 24 4 to 6	
Asparagus		4 lbs. 50 to 60 lbs.	14 to 24 24 to 30	3 to 6 1 2 to 3 1½ to 2	Leek		4 lbs. 3 lbs.	14 to 36 2 to 3 12 to 18 4 to 12	3/4
Beans, Lima	½ lb.	30 to 50 lbs.	24 to 36	3 to 6 1½ to 2	Melon, Musk	1/2 oz.	3 to 4 lbs.	70 to 80 36 to 60	8/4
Beans, Pole	1/	30 to 35 lbs. 8 to 14 lbs.	36 to 48 14 to 24	6 to 8 1½ to 2 3 to 4 ½ to 1	Melon, Water Mustard		3 to 4 lbs.	72 to 96 72 to 96	1/4 1/4 1/4 1/4
Beet, Mangel & Sugar	: ½ oz.	6 to 10 lbs.	18 to 24	6 to 9 ½ to 1	Okra	7 (0)	4 lbs. 8 to 10 lbs.	14 to 24 6 to 9 24 to 40 18 to 24	79
Swiss Chard	740	6 to 10 lbs.	18 to 24	10 to 12 1	Onion		3 to 4 lbs.	18 to 24 3 to 4	8/4
Brussels Sprouts		4 oz. 4 oz.	20 to 36 20 to 36	16 to 22 ½ to 1 16 to 22 ½ to ¾.	Onion (for sets)		60 to 85 lbs. 3 to 4 lbs.	12 to 14 Not thin'd 18 to 24 3 to 4	3/4
Cabbage	2 T	4 oz.	18 to 36	14 to 24 ½	Parsley	1/4 oz.	3 to 4 lbs.	12 to 20 6 to 8	1/2
Carrot		5 oz. 3 to 4 lbs.	20 to 32 16 to 24	20 to 30 ½ to 1 1 to 3 ½	Peas	% lb. % oz.	90 to 180 lbs. 1 to 2 lbs.		to 2
Calliflower		4 oz.	24 to 30	20 to 24 1/2	Potatoes	8 lbs.	800-1000	24 to 36 18 to 24	6
Celery	⅓ oz. ⅓ oz.	4 oz. 4 to 5 lbs.	24 to 30 20 to 36	4 to 6 ¼ 2 to 3 ½ to 1	Pumpkin	9.7	3 to 4 lbs. 10 to 12 lbs.	96 to 110 60 to 84 12 to 18 1 to 2	14
Collard	1/4 oz.	5 oz.	24 to 30	14 to 18 1/2	Rhubarb	1/2 oz.	3 lbs.	24 to 42 20 to 24	8/4
Corn, Pop	3 oz. 4 oz.	6 to 8 lbs. 10 to 12 lbs.	34 to 40 30 to 42	6 to 8 1 9 to 12 1	Rutabaga	4.0	2 to 4 lbs. 4 to 5 lbs.	18 to 24 4 to 7 20 to 24 6 to 10	12
Corn Salad	2 oz.	10 to 12 lbs.	14 to 18	8 to 4 %	Salsify	% oz.	7 to 8 lbs.	18 to 24 2 to 3	\$4 14 14 14 14 14 14 14 14 14 14 14 14 14
Cress		10 lbs. 3 to 4 lbs.	12 to 18 48 to 60	2 to 4 ½ 12 to 36 ½ to ¾	Sorrel	½ oz. % oz.	4 to 5 lbs. 10 to 20 lbs.	18 to 22 2 to 3 14 to 18 3 to 5	32
Dandelion	1/4 oz.	5 to 6 lbs.	18 to 22	6 to 10 ½	Squash, Bush	1 02.	4 to 6 lbs.	42 to 48 42 to 48	1
Dill Egg Plant		5 lbs. 5 to 6 oz.	20 to 36 24 to 36	4 to 6 1/2 18 to 24 1/2	Squash, Vining Sunflower	1 oz.	4 lbs. 7 to 8 lbs.	72 to 90 60 to 90 48 to 70 10 to 12	1
Endive	. ½ oz.	4 to 5 lbs.	18 to 24	8 to 12 1/2	Tomato		2 05.	40 to 60 86 to 40	1/4
Fennel	22	3 to 4 lbs. 4 to 5 lbs.	24 to 32 24 to 32	5 to 8 %4 14 to 22 1/4	Tobacco	1/2 oz.	2 oz. 2 to 3 lbs.	36 to 48 24 to 36 12 to 20 2 to 4	14
	/2 00.	1 00 0 108.	24 00 02	14 00 22 72		72 02.	2 00 0 105.	1200000	1.00



WHAT AND HOW TO PLANT

In selecting vegetables to plant include the ones your family should eat as well as the kinds they like. A well balanced diet is most important and should include green vegetables, yellow vegetables, leafy vegetables, root vegetables, and tomatoes.

SOW SEEDS AT RIGHT TIME

Sow seeds at the proper season and avoid waste. We have the highest quality seeds available.

Work down the top soil with a rake until it is level, fine and in perfect physical condition, before attempting to plant seed

Seed should be sown thinly in shallow rills, made with a stick as shown in the sketch. To make the rows straight, follow a line of string stretched between stakes placed at either end of the row. The depth of this rill depends on the variety sown. Check with the depth of planting chart on page 3 before sowing seed.

Seed may be sown directly from the packet, or by rubbing a pinch of seed between the thumb and the first two fingers. This latter method gives a thinner distribution of the seed. Small seeds should not be thicker than 10 to the inch. Sow one row at a time and after each row, cover the seed lightly, touching the loose soil with a rake. Place the board used for walking between the row on top of the sown seed and walk across it to firm the soil for better germination.

Treatment of the seed with "Cuprocide" will eliminate a great deal of damping off, and rotting of the seed after sowing, especially if sown during the wet weather.

If the soil is moist, but not wet, at the time of sowing, watering will not be necessary before the seedlings are up. If it dries out, however, sprinkle carefully so as not to wash out the small seedlings.

USE PLENTY OF GOOD FERTILIZER

Fertilizers are very important. The food value of garden vegetables for human consumption depends greatly on their mineral content, derived from the soil. The vitamin content depends on the vigor of growth and the abundance of sunlight. Therefore, the fertilizing of the soil is important to insure vigorous growth and healthy mineral and vitaminrich vegetables. A good practice is to spade commercial fertilizer, balanced to supply the necessary proportions of nitrogen, phosphorous and potash. Later

in the season, applications of fertilizers in small doses, as side dressings, keep vegetables in active growth. Ask us for special fertilizer formulas for vegetable gardens.

WATERING IS IMPORTANT

Watering will be necessary during the growing season. It should be done early enough in the day to evaporate drops of water from the leaves before nightfall. Water generously, soaking the soil deeply each time, rather than by quick "sprinkles" with the hose. In this way, the roots will grow deep, feed better and be protected from drouth, in case watering is missed during a hot dry spell. Once every week or ten days should be ample for moist soils. No rules can be formulated to determine the necessity of watering. Observation of the soil, and testing with a shovel, will best determine when to water.

SPRAY AND DUST FOR PESTS

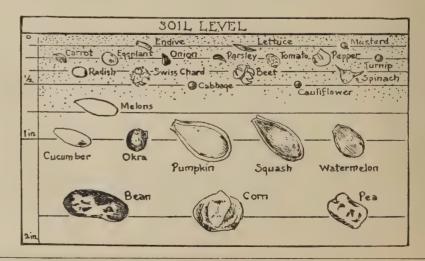
Insects and diseases may infest the vegetable garden but may never become a serious problem if one watches for evidence of damage and takes prompt action. Sprays and dusts are available in convenient packages to combat every garden pest. When spraying cover all parts of the plant and both sides of the leaves. Do a thorough job promptly and avoid a serious infestation.

Success in gardening starts by following certain rules. Whether these be noted from the pages of books or gathered from practical experience makes little difference. The process is the same. Good seed, soil, water, fertilizer, and work makes for success.

If we understand that almost every seed we sow has stored within its shell the ability to sprout and grow into a useful plant we can easily think of the seeds as plants ready to set out which will make the picture of the finished garden clearer in our mind's eye, thus avoid ing many of the early mistakes of planting.

Seeds are started by sowing in the soil of the garden. There germination takes place readily when conditions required for growth are met. Fortunately good garden soil, well prepared meets these requirements: soil moisture, usually pres ent after winter rains or supplied by irri gation; soil temperature, heat from the sun and the main reason why certain tender seeds should be delayed in sow ing, (until the ground is warm), and air and moisture drainage supplied by the hard work of soil preparation which we have been recommending. As far as fer tilizer is concerned young seedlings don't need extra feeding until they have used up the stored food of the cotyledons. It is better to delay feeding until growth is well started and then apply gradually. This is in addition to the humus (manure peat, compost, etc.) and phosphate and other fertilizers put into the soil at the time of preparation. They are deeper down and can be reached by the plants as they grow.

By thinking of the seeds as plants we will sow them far enough apart to re duce drastic thinning. We wouldn't set plants out very close because before long we would not have much of a garden. competition between the plants would reduce the flowers, fruits and shape of the individual plants to an undesired minimum. In both vegetable and flower gardens we strive for perfection in either flowers, fruits or foliage—poor quality is seldom tolerated.



Knox is Headquarters for

LADINO CLOVER AND PASTURE GRASSES



Thousands of Acres of Ladino Have Been Planted With Knox's Seeds

Advantages of Ladino Clover

Ladino Clover is an ideal dairy pasture crop just as alfalfa is an ideal dairy hay crop. It will grow very satisfactorily on land that is not good for alfalfa. By that I mean it is an ideal crop to raise on shallow soil, on soil where there is a high water level or where alkali is present.

It continues to flourish even when pastured at the rate of four cows per acre during the growing season.

The Plant

The Ladino Clover plant is very similar in appearance to ordinary White Dutch clover, but it grows more rapidly and becomes much larger. Its roots are comparatively shallow. They branch at the crown, just above the ground, and send out runners in all directions for 3 or 4 feet. These runners branch and take root, every few inches, at the nodes.

The stems, which lie close to the ground, are held by the many roots and will not be pulled off or eaten by stock while pasturing. The ends of the stems, which grow as high as 2 feet, are not injured by pasturing or cutting.

When to Plant Ladino

Seemingly the best months for seeding Ladino are August. September, October, November, February, March, April and May. Land should be prepared the same as for alfalfa seed. Deep plowing is not necessary. If the land has been in beans or any other cultivated crop, it may be simply disced and harrowed, so that a shallow seed bed will be made. You need sow only 4 to 6 pounds of seed to the acre. This makes Ladino a very economical crop to plant.

Irrigating Ladino

Although Ladino is not a particularly dry or "thirsty" plant, but is rather a hardy "rustler" capable of standing the hardest pasturage, it is necessary to keep the soil moist in order to get a satisfactory stand. This is especially true in soil containing alkali, which must be kept well watered.

Lb. \$2.50. Write for quantity prices.

Suggested Grass Mixture With Ladino

A number of dairymen have reported very good results from planting Ladino with other grass seeds. Such a mixture reduces the possibility of bloating. They have found the following mixture very satisfactory: Ladino Clover, 3 lbs.; Perennial or Domestic Rye, 6 lbs.; Orchard Grass, 1 lb.; Meadow Fescue, 2 lbs.

Redtop Grass. A perennial and a native of this country, redtop grass (Agrostis alba) has a creeping habit of growth which makes a coarse, loose turf. While it is a wet-land type of grass, it will withstand considerable drought. It is primarily adapted to mountain meadows and pastures but may have a place as a sod-former in seepage areas where it will furnish late feed. Its normal maturity dates are similar to those of timothy. Per lb. 55c.

Timothy. A perennial, timothy (Phleum pratense) is a native of Europe and thus, like redtop grass, a northern species. It is frequently used as a hay and pasture plant in areas of cold winter and moderate summer temperatures. But it has never been durable when used in a mixed pasture in the lower elevations of this state. Per lb. 30c.

Hubam Clover (Melilotus Alba, annual). Annual sweet blossom clover similar to White Blossom Sweet Clover. Per lb. 55c.

White Blossom Sweet Clover (Melilotus Alba). Hardy biennial, strong grower, attaining a height of from three to six feet. Not too well relished by stock. Must be kept fed down to prevent its becoming too coarse. Large strong tap root; excellent for cover crop. Per lb. 35c.

Yellow Blossom Sweet Clover (Melilotus Officinalis). Similar to White Blossom Sweet Clover, but growing shorter and leafier, and having yellow blossoms. Per lb. 35c.

Red Clover (Trifolium Pratense). Adapted to only the coastal and higher elevations of California and Nevada. A short-lived perennial producing excellent quality hay or forage. Relished by all stock. Ladino is much more satisfactory for the central valleys of california. Per lb. 90c.

Crested Wheat Grass (Agropyrum cristatum). Perennial grass with characteristics similar to Brome Grass. Will withstand cold and drought. Per lb. 95c.

Reed Canary Grass (Phalaris arundinaceae). Coarse, tall-growing perennial making a large bunch plant with leafy stems. Spreads underground by creeping root stalks; does well in swampy ground and produces good quality feed, but should not be pastured too closely continuously. Per lb. \$1.15.

Buffalo (Mesquite) Grass (Buchloe dactyloides). One of the most nutritious and fattening grasses for pasture and range from Texas north to Canada, readily grazed by all classes of livestock from late spring to late winter. Grows best on tight clay and clay loam soils. Turf thick and perennial; plants spreading by means of many surface runners radiating in all directions; leaves fine and abundant. Becomes dormant during drought and in winter. Grows with Bermuda in drier soils, where it is also valuable as a lawn grass. Seeds are borne in small burs on short seed stems among the leaves. While most nutritious in the cool moist to cool dry periods of spring and fall, it cures on the ground and retains some of its feed value during periods of drought and in winter.

White Dutch (Trifolium repens). The most popular clover for lawn grass mixtures. Grows best in the cool moist periods of the fall and spring, flourishing on well-drained, moist soils high in lime content. It adds forage value when sown with such grasses as Dallis, Carpet, Bermuda, and Kentucky bluegrass. Plants perennial, 3-12 inches; stems fine, numerous, leafy, creeping. soft and succulent; developing roots at all joints. Seeds very small, yellow to red, heart shaped. Per lb. \$1.15.

Burnet (Poterium Sanguisorba) is neither a grass nor a clover. It is a long-lived hardy, tender, palatable herb, very leafy, growing from a hardy tap root. It grows to a height of about two feet under favorable conditions. It grows well on many types of soil including light sandy loam, staying green the year round. It apparently has no temperature limits, and when planted on permeable soil is able to withstand low rainfall and long dry summers as well as to stay green under the snow in winter. It is relished by all livestock when used in well balanced mixtures, but when planted alone the stock become very tired of it as it has a taste all of its own. Burnet does not cause bloat. Per lb. \$1.15.



Alsike Clover. A perennial and a native of Scandinavia, alsike clover (Trifolium hybridum) has a place in irrigated pastures chiefly in the northern end of the state (Lassen, Modoc, Siskiyou, and eastern Shasta counties). On some sites farther south (notably the northern Sacramento Valley), it is incorporated in the mixture for heavy soils and sites where seepage or irrigation water concentrate to such an extent as to be intolerable for Ladino clover. It is primarily adapted to wet, cold, and sour soils of heavy texture. Lb. 80c.

Bur Clover. An annual and native of the Mediterranean region. Bur clover (Medicago hispida) has long been a common and valued inhabitant of all but the colder portions of California. It does not need to be seeded except in those fields where the natural stands have been eliminated or greatly reduced by close pasturing or previous farming practices. Being a winter annual, it is dependent entirely upon seed for reproduction. North of San Francisco it is not popular in irrigated pastures because it is there semi-dormant in the winter and starts in the spring very little earlier than Ladino clover. In the southern part of the state, however, it grows well all winter and thus fills the need for a legume to extend the pasture season. Per lb. \$1.10.

Subterranean Clover. An annual, subterranean clover (Trifolium subterraneum) is a native of Europe, Asia, and Africa. The climatic tolerances of this legume are similar to those of bur clover. It is a prostrate, soft woolly plant, all parts of which are covered with fairly long, soft hair. The three leaflets forming each leaf are carried on a long stalk and each leaflet is heart-shaped and faintly toothed at the summit. After flowering, the stalks which carry the flower heads turn downward and grow until the seed head is pushed below the surface of the soil. Although an annual, this habit of burying its own seed renders this plant equivalent to a perennial. Its season of growth is similar to that of bur clover and its place in the pasture would therefore be similar. Perhaps its chief advantage is that it will do well in really acid soils if there is sufficient available phosphorus. The general use of this clover is not now recommended. It is mentioned here chiefly because it has come into prominence recently and has already been found adapted to a considerable part of the state. A few test plantings of it in districts where bur clover is recommended, or in some acid or granite soils where bur clover does not thrive, might well be made in order to develop facts as to its real place in irrigated pasture practice. Per lb. \$1.20.

Strawberry Clover. A perennial and a native of eastern Mediterranean countries and southern Asia Minor, strawberry clover (Trifolium fragiferium) is a low-growing plant that spreads by creeping stems that root at the nodes. The flower heads are round and pinkish to white in color, resembling an immature strawberry. This clover seems to have found a place in some northern areas of the state (particularly in the Tule Lake basin and on the coastal plains of Humboldt County). Its chief use elsewhere is on soils that are too saline to produce Ladino. While with ample irrigation, it has survived on such sites in the Sacramento and San Joaquin valleys, it has not yet become conspicuous in any of the warmer sections of the state as a producer of forage. There it is at best a low undercover plant that produces some feed and probably contributes some nitrogen to improve soil conditions. Further experience is necessary to define its range and usefulness in irrigated pastures in this state. Per lb. \$2.25.

Bird's-Foot Trefoil. A perennial and a native of Europe and Asia, bird's-foot trefoil (Lotus corniculatus) has recently been widely publicized and perhaps overstressed as a wonder forage for irrigated, semi-irrigated, and sub-irrigated lands. It is heing widely tested throughout the state to find its best use and value, but as yet our experience with it is too limited to justify its general use in irrigated pastures. It is producing hay and forage on the coastal plains of Humboldt County and is being grown in the delta of San Joaquin and Solano counties and on a sub-irrigated field near Dos Palos in Merced County. These limited experiences, plus the early results of tests in a number of counties, indicate that this legume may have a place on moderately alkaline lands where irrigation or seepage waters are sufficient to meet its needs. The possible use of bird's-foot trefoil in dense Bermuda stands has been suggested elsewhere in this catalog. It may well find a place in areas where irrigation water cannot be applied often enough for Ladino clover, but probably will not supplant the latter for general use. Per lb. \$1.75.

Domestic Ryegrass. Domestic ryegrass (Lolium multiflorum) is a short-lived perennial and a native of Europe. So much breeding and selection work has been done on the ryegrasses (of the genus Lolium) and so many local and trade names have thus been attached to them that a word of general explanation may not be out of place here. Practically all the cultivated ryegrasses originate in two species: Lolium mult.florum, most commonly called "Italian ryegrass" or "annual ryegrass", and L. perenne, generally known as "perennial ryegrass", or "English ryegrass". Some call them both short-lived perennials, while others call Italian ryegrass a short-lived grass, usually an annual. Various selections of Italian ryegrass are known as "Western-grown", "Oregon grown", "Domestic", "Wimmera", and "Westerwold". Commercial seed now marketed here is most commonly known as Western grown or as Domestic ryegrass, and it seems fairly certain that this contains a considerable percentage of hybrids with perennial ryegrass. In any event, mother stools have been konwn to survive in California for three or four years. Paceys ryegrass, Clunes ryegrass, and many other selections of perennial ryegrass have no outstanding merit above that of the parent. All strains of Italian ryegrass can be distinguished from perennial ryegrass by the fact that the emerging leaves are rolled while in the latter they are folded. Generally there are short awns on the seeds of Italian ryegrass and not on perennial, but this character varies markedly.

Domestic ryegrass is a more stemmy and less leafy plant than perennial. It owes its popularity as an irrigated pasture plant in California to its high palatability, its excellent growth and consequent high production and its early-spring growing habit. This latter quality renders it valuable as early feed and as a moderately good competitor with the flush spring growth of Ladino clover—hence a valuable bloat deterrent. No other grass we now have can compete with it in these respects. It does tend to become dormant in late summer and should be mixed with other grasses to supplant it at that season. Per lb. 25c.

Perennial Ryegrass. Perennial, or English, ryegrass (Lolium perenne) is fully as palatable as Domestic and bears more basal leafage, but does not produce as high a yield. It grows later in the summer and is desirable from that standpoint. In pastures that are to be used largely for sheep, this is probably a better grass than its coarser relative. Per lb. 35c.

Orchard Grass. A perennial and a native of Europe, orchard grass (Dactylis glomerata) can be readily distinguished by its large circular bunches, folded leaf blades, and compressed or flattened sheaths (especially at the base of the stems). The shape of the flower head has suggested the English name of "cocksfoot". Though orchard grass is coarse and tufty, it has retained its popularity in pasture mixtures here because it is hardy, persistent, and aggressive and is relished in the earlier stages of growth by all classes of livestock. Even sheep relish the abundant leafage, though they are inclined to avoid the main culms and heads. Thus they often permit too much maturity and woodiness, and coarse tussocky bunches result, which lead to some complaint against this valuable grass. Careful management is essential, and clipping should be resorted to whenever necessary to keep orchard grass from getting beyond the stage of greatest usefulness. Per lb. 50c.

Meadow Fescue. A perennial and a native of Europe, meadow fescue (Festuca elatior) is a tall-growing bunch grass that normally ripens as a mid-season grass. But it is very favorably considered in the Middle West as a late fall feed, since it remains active very late under grazing. It is not so tufty as orchard grass, but contains much basal leafage which is bright green and very succulent. Meadow fescue starts very slowly in a mixed pasture and may not be much in evidence for several years. Under proper management it should be very durable, particularly where summer temperatures are not too high. Per lb. 60c.

Tall Fescue. Tall fescue (Festuca elatior 29366) is a selection of meadow fescue and, like it, a perennial, but more drought-tolerant. It is thriftier in growth than the parent and bears more abundant basal leafage. Tests of two years here in California have indicated that it is adapted to a wide range of conditions. Per lb. 90c.

Harding Grass. A perennial, Harding grass (Phalaris tuberosa var. stenoptera) came to us from Africa though the species, P. tuberosa, is a native of the Mediterranean. Harding grass grows in large, dense, leafy tufts. When once established, it is very persistent. High seed prices and low germination have hindered the fullest use of this plant. It is one of the few perennials that makes a good growth during the winter when most other plants are dormant, but it will not survive the cold winters of northeastern California. Harding prefers heavy black soils and deep volcanic loams, but will produce well on lighter soils underlain by heavier strata. Though a tall and rather coarse grass, its abundant leafage is relished by all classes of livestock. Only a light seeding (2 or 3 pounds per acre) is recommended as a means of prolonging the pasture season in the more temperate parts of the state. Per lb. \$2.50.

Dallis Grass. A perennial and a native of South America, Dallis grass (Paspalum dilatatum) normally has a deep, strong root system and grows in clumps which tend to die out in the center and enlarge around the periphery as the plant ages. Ladino-clover plants in association with it are often found occupying the centers of these old stools. After nearly 20 years of experience, this association is classed as ideal by graziers who like Dallis grass. The leaves are numerous near the ground but few on the stems, which are usually drooping or angled. In most of the state (except the colder portions where it will not survive the winters), it starts rather late in the spring and becomes dormant in the fall. But during the summer its recovery after grazing is more rapid than that of any other grass we have. Its aggressiveness in this respect has brought it into disrepute with some operators since other grasses, it is not so palatable as it approaches maturity. Some irrigation districts oppose the use of this grass because its light oily seeds float on the water and the plants become established along the ditch banks. The contention does not seem well founded since such areas are generally occupied by plants much less desirable, and frequently more difficult to control than is Dallis grass. Per lb. \$1.30.

Smooth Brome. A perennial and a native of central Europe and China. Smooth brome (Bromus inermis) is a tall-growing leafy grass that spreads by underground creeping rhizomes which tend to become sod-bound in a few years so that renovation is essential to the best results. In northeastern California, smooth brome is popular as a hay and pasture plant, but it has never found a place in any part of the state in which the winters are mild and summer temperatures high. Its general use is therefore not recommended. Per lb. 65c.

Kentucky Bluegrass. A perennial and a native of Europe and Asia, Kentucky bluegrass (Poa pratensis) is a true creeping, or colony, grass. While it is primarily adapted to the colder parts of the state, it is not generally recommended there for planting in a pasture mixture. The objections to it are that it produces too dense a sod and that its growth is not luxuriant enough to provide adequate livestock-carrying capacity. In recent years Kentucky bluegrass has come into the pasture picture in parts of the San Joaquin and Sacramento valleys. Some producers believe it has a place there in association with Ladino clover, especially for sheep. Observations in several counties indicate that it is crowding out the clover and that it does not yield so much forage as the stronger-growing plants available. This may be partly due to a lack of adaptation in these areas. Prospective planters should make observations on local experience, where available, before committing themselves to bluegrass in irrigated pastures. Per lb. \$1.10.

Rhodes Grass. A perennial and a native of South Africa, Rhodes grass (Chloris Gayana) is a fine-stemmed, leafy grass growing to an average height of nearly 3 feet under favorable conditions. It spreads by running branches which root and produce a tuft at every node. It will not withstand winter temperatures below 18° F. Rhodes grass is increasing in popularity as an ingredient of pasture mixtures in the Palo Verde and Imperial valleys of southeastern California, doubtless because it is quite at home there. Farther north, within its climatic limitations, it is not generally used except in areas that are too alkaline to be tolerated by most other species. On such sites it probably has a real place. Through its ability to absorb alkali salts, however, it may become so saline as to have a scouring effect on livestock. When this is true, the stock should be rotated to other and less purgative feeds. Per 1b. 85c.

Tall Meadow Oatgrass (Arrhenatherum elatius (L.) Beauvois); sometimes called tall oatgrass, meadow oatgrass, and evergreen grass, is a hardy perennial growing to the height of 30 to 60 inches and producing large tufts or bunches. It produces seed in an open head, or panicle, somewhat similar to cultivated oats, though the seed is much smaller and more chaffy. Per lb. \$1.10.

Red Fescue (Festuca rubra L.) is very similar to sheep fescue, but the leaves are bright green and the plant does not grow in tufts but creeps by underground stems, so that one plant may eventually cover a circle 2 to 4 feet in diameter.

PARAMOUNT No. 23 SUDAN

A few years ago the Division of Agronomy developed a new strain of Sudan that is far superior to the old strains. They named it No. 23 and it is rapidly succeeding the old strain. The leaves are finer, stalks are finer and sorghum crosses have been eliminated. Tests conducted have shown that it will yield a ton and a quarter more to the acre than the old variety.

The small difference in the costs of the seed is more than offset in the crop production. Good for both pasture and hay. Write for latest market prices.



SUDAN GRASS

Paramount Extra Fancy Chilean or Super Dairy Alfalfa Seed

Scarified for QUICK GERMINATION



Extra gancy

CHILEAN or COMMON

- PARAMOUNT'S finest grade of Chilean Alfalfa Seed-"The Peak of Perfection"-extra fancy in every respect with a purity of 99.75 or better, and germination of 90 per cent or better. It will please the most critical grower. Per lb. 35c.
- Only carefully tested seed shown to be free of noxious weeds are allowed to go into PARAMOUNT Brand. Saves you the cost of eradicating weeds. Brings a better price for your hay.

- Rich uniform growth of PARAMOUNT Seed the result of careful blending of seed from different native sources. Seed selected from THE NORTH (hardier, longer lived but slower growing alfalfa)—CENTRAL AREA (medium growing, fineleafed alfalfa)—THE SOUTH (early, quick-growing, shorter lived alfalfa).
- PARAMOUNT'S mill is equipped with modern machinery for removing chaff, dirt, gravel, dead and green seeds. You get only plump seeds of uniform size, free from impurities.
- PARAMOUNT'S method of scarifying is complete and thorough. Quick and even sprouting is assured by scratching the hard outer coat of the seed so that the moisture will penetrate. This is done on delicate emery-equipped machines. During the process all immature seeds are broken and eliminated.
- PARAMOUNT seed is scientifically tested both for purity and germination. Thousands of tests are made during the season by testing experts. Only recent tests will be found on PARA-MOUNT' label.

KNOX'S SELECTED FIELD CORN

KING PHILIP—YELLOW

This is a hard yellow flint corn and is generally referred to as 90-day corn. It is drought-resisting and will give a fair yield where most corns are a failure. Plant 8 to 10 pounds per acre in hills for shelled corn or for silo. 1 lb. 15c; 10 lbs. \$1.00.

REID'S YELLOW DENT

In the upland sections requiring a corn that will mature in about 115 days, Reid's Yellow Dent has made a well-deserved reputation because of its large yields and superior type of ear. It is a big yielder on good loam and heavy land, making ears that average 9 to 10 inches long with 18 to 24 rows to the ear, and well filled out at butt and tip. It is a true dent corn, the grains are medium narrow, wedge-shaped, and the rows are so close that there is practically no waste space between the rows. The cob is small for the size of the ear; makes one or two ears to the stalk. Lb. 15c; 10 lbs. \$1.00. Write for prices on larger quantities.

IMPROVED LEAMING

Leaming is known the country over as a big yielding, early maturing yellow corn, making generally two big ears to the stalk with rarely a barren stalk. It does well on all soils, but prefers light to medium soils. The grain is wedge-shaped and covers the entire cob. The ears average about 10 inches long, with 18 to 20 rows to the ear. The color is a deep, reddish yellow. Matures in about 100 days. Lb. 15c; 10 lbs. \$1.00.

HICKORY KING

The grain is so wide and deep and the cob so small that often a single grain will cover the end of a broken cob. It has been called Poor Man's Corn, because it can be depended upon to produce a crop on poor, thin land; on good land it bears two ears to the stalk. Lb. 15c; 10 lbs. \$1.00.

IMPROVED WHITE DENT

Or Stanislaus White Dent

Improved White Dent has been the reliable old stand-by with southern corn growers, and its merits are generally recognized. It makes a single ear to the stalk, but they are long and heavy; the grains are quite wide, deep and firmly set on a medium-sized cob. The stalk is tall and carries a good growth of fodder. Lb. 15c; 10 lbs. \$1.00.

EARLY MATURING—HEAVY YIELDING

Proper selection of Seed Corn is a matter of working year after year, planting good seed in the beginning, watching the particular stalks which grow best and which set enough ears the proper distances from the ground, and then cutting the tassels from all other stalks in the field. The seed ears must be selected on the stalk, and ripened and dried under correct conditions. The grains must be shelled and stored and graded so they will be even in size, and their vitality maintained unimpaired. Finally, the seed must be tested for germination. We have picked growers who give their corn crops the attention necessary to produce first-class seed.

EUREKA ENSILAGE

Eureka Ensilage corn is without a doubt the heaviest yielding ensilage corn adapted to California climatic conditions. grows to an average height of 14 feet, has very leafy stalks bearing one to three ears to the stalk, and has established a record of an average production of 30 to 35 tons per acre. This when cut and put in the silo furnishes a feed that is very succulent and of the highest feeding value, and is relished by all kinds of stock.

Our seed stock of Eureka Ensilage Corn for this season is of exceptionally fine quality and selected for size uniformity for both ear and kernel. Lb. 15c; 10 lbs. \$1.00. Write for quan

ORANGE COUNTY PROLIFIC

Orange County Prolific is a California product of the white dent variety. It is also an exceptionally heavy yielder and highly recommended for ensilage purposes. We consider it next on the list following Eureka Ensilage Corn. What we have said regarding the selection of our seed stock for Eureka Corn also applies to this variety. Price per lb. 15c; 10 lbs. \$1.00. Write for quantity prices.

MEXICAN JUNE CORN-WHITE

Or Pride of Modesto

Very early and hardy, stalks growing to an average height of 7 or 8 feet and producing 30 to 60 bushels of corn per acre. This corn is also used for roasting purposes in many sections of California. 1 lb. 15c; 10 lbs. \$1.00.

Grain Sorghums

SELECTED DWARF MILO MAIZE

Since the cost per acre of Milo Maize Seed is very small it certainly pays to secure the best seed obtainable. Where the soil is properly prepared it requires but 3 to 4 lbs. per acre. therefore, the cost of seed would be but a few cents, hence Milo Maize Seed should be considered entirely from the quality standpoint. Yield of grain per acre is what you want and you cannot afford to experiment on strains that are being grown by inexperienced growers. Being of uniform height it may be harvested by machinery, but if harvested by hand the large heads reduce the cost of harvesting. It grows to a height of about 4 feet, is of stooling habit, and individual hills of 5 to 7 stalks in a stool each producing a large compact head are not uncommon throughout the field. We produce our seed maize in isolated districts where there are no other sorghum crops grown near and by hill and head selection each year, the strain is kept uniform and true. Considering again that it requires but a few cents per acre to plant the very best Milo Maize Seed, there appears to be no good reason why the planter should experiment with untried strains. If you are going to plant Maize, let us send you a sample of our seed and quote prices on quantity. Lb. 10c; 10 lbs. 75c. Write for quantity



EGYPTIAN CORN

DOUBLE DWARF MILO MAIZE

This variety of Red Milo Maize is very dwarf, growing only 2 to 2½ feet high and has been developed especially for convenience and economy in harvesting. It can be cut and harvested by machinery in the same manner as heading grain. Very profitable crop to grow, the average yield being two tons per acre. Sow at the rate of 4 to 5 lbs. per acre from April until middle of June. Lb. 10c; 5 lbs. 75c; Write for quantity price.

WHITE MILO MAIZE

Grows same as Dwarf Red Milo and the kernels are almost pure white. Lb. $10c;\ 10$ lbs. 75c.

EGYPTIAN CORN

This is also one of the drought resisting non-saccharine crops. The grain is produced in large compact heads and the seed is flat and pure white. This seed is used very extensively as a chicken feed and also ground into flour which is used for edible purposes. Plant the same as Milo Maize. Price per lb. 10c; 10 lbs. 75c.

HONEY SORGHUM

Is the prize variety without a doubt. All growers every year are loud in its praise. Honey Sorghum is a selection from one of the earliest introductions, and has been regarded with special favor for ensilage and for syrup purposes. It is the best variety for silage purposes, having slender leafy stalks, varying in height from 8 to 12 feet. It is medium late maturing and has decidedly tender stalks, and is important from a forage standpoint. Imagine an average of 27 tons or over per acre. The method of seeding will be determined largely by the purpose for which it is grown. When the crop is to be used for fodder or silage, it is usually planted in rows 3 to 3½ feet apart, using up to 5 pounds of seed per acre. Price per lb. 10c; 10 lbs. 85c. Write for special prices in larger quantities.

EARLY AMBER

Furnishes a large field of most nutritive forage which can be fed either green or cured, and will yield two or three cuttings a year, stooling out thicker each time it is cut. It grows 10 to 12 feet high. Sow broadcast for forage at the rate of 15 pounds per acre. Per lb. 10c; 10 lbs. 85c.

Cover Crop Seeds

MELILOTUS INDICA

One of the best legumes for green manuring in the orchards of California, because it may be planted late in the fall after all crops have been harvested, will grow all winter with only the season's rainfall. It prevents erosion during the rainy season, is easily plowed under, is richer as a fertilizer and if allowed to stand until July will prevent much of the June drop. Meiliotus Indica is the best legume with which to build up your soil during the rainy season for the summer crop to follow, particularly potatoes and melons. Sow 20 lbs. per acre. Per lb. 10c; 10 lbs. 85c. Ask for quantity price.

CANADIAN FIELD PEA

When it is too late to plant Vetch or Melilotus plant Canadian Peas. They may be planted as late as January and yet be plowed under in time for planting a summer crop. If your summer crop, like melons and potatoes, is not harvested until November, plant Canadian Peas. Neither is the Canadian Pea inferior to other cover crops when planted at the right time, which is from September to February. If the soil is too wet after planting the seed will rot. Broadcast 50 fo 60 lbs. per acre. Per lb. 15c; 10 lbs. \$1.00. Write for quantity price.

PURPLE VETCH

The chief value of Purple Vetch lies in its rapid growth. It does not have the same tendency to stop growing when the thermometer registers around 26 degrees as do many other varieties of cover crop. However, it does not stand quite as much cold as Melilotus Indica. It is one of the leading cover crops for planting during the rainy season in citrus orchards and for this purpose 60 lbs. should be sown to the acre. It is also a valuable crop for hay or silage. Lb. 20c; 10 lbs. \$1.50. Write for quantity price.

COMMON VETCH

This variety also makes an excellent cover crop for fall sowing and is commonly sown with oats, wheat, rye or barley. When grown together the vetch is held off the ground and at the same time fertilizes the grain crop. For this intention sow 30 lbs. grain and 20 lbs. vetch to acre, or if planted alone, 60 lbs. of vetch per acre. Per lb. 15c; 10 lbs. \$1.00. Write for quantity price.

BROAD WINDSOR BEAN

Sometimes called Horse Beans, grows upright on a single stem bearing a profusion of large well-filled pods. The roots are enormously productive of nitrogen. It will withstand 28 degrees temperature; therefore, may be planted as late as September for best results as a winter cover crop. Sow 60 to 80 lbs. per acre. Lb. 25c; 10 lbs. \$2.00. Write for quantity prices.

WILD BLACK MUSTARD

(Brassica Nigra.) Used to some extent for a cover crop. Sow 8 to 10 lbs. per acre. Per lb. 10c; 10 lbs. 85c.

WHITE MUSTARD

(Brassica alba.) This white seed mustard has yellow flowers and is thus sometimes called Yellow Mustard. It grows very rapidly and is now used extensively as a cover crop. Sow 10 to 15 lbs. per acre. Lb. 25c; 10 lbs. \$2.00.

TRIESTE MUSTARD

(Brassica juncea.) The most commonly used mustard. Although not so rapid in growth as the white mustard it makes a heavier tonnage. Sow 6 lbs. per acre. Lb. 25c; 10 lbs. \$2.00.

READY REFERENCE CHART

Detailed Descriptions Elsewhere in This Bulletin

COMMON NAME	Annual or Perennial	RATE AND TIME OF SEEDING		Soil. and Moisture Conditions
ALFALFA	Perennial	15-20 lbs. drilled. 25 Broad 2- 4 lbs. in Mixtures	dcast. Fall and Spring	Deep, well drained soil. Requires irrigation.
ALSIKE CLOVER	Perennial	4-6 lbs. Broadcast.	Fall and Spring	Will stand more moisture than other legumes.
BERMUDA GRASS	Perennial	6-8 lbs. Broadcast. Spring a	fter frosts are over.	Wide tolerance to both moisture and drouth.
BIRDSFOOT TREFOIL	Perennial	4-5 lbs. Broadcast. 1-3 lbs. in mixture	Fall and Spring	Will stand both excessive moisture and drouth. Partially tolerant to alkali.
BLUEGRASS	Perennial	10-15 lbs. Broadcast 2- 5 lbs. in mixtures	Fall and Spring	Well drained loam with frequent irrigations.
BUR CLOVER	Annual		and Early Winter	Grows during winter months producing feed when other legumes are not growing. Usually reseeds itself.
BURNET	Perennial	2-4 lbs. in mixtures	Fall.	Stands considerable drouth. Not a grass plant. Use only in mixtures.
BROMEGRASS (Smooth & Awnless)	Perennial	12-20 lbs. Broadcast 3- 6 lbs. mixtures	Fall and Spring	Prefers heavy soil in high altitudes. Drouth resistant.
BUFFALO GRASS (Mesquite)	Perennial	2-3 lbs. in mixtures	Fall and Spring	Best on clay soils. Withstands drouth. Forms heavy sod.
CREEPING RED FESCUE	Perennial	15-20 lbs. Broadcast 2- 5 lbs. in mixtures	Fall and Spring	Adapted to light soils and shaded locations.
CRESTED WHEAT GRASS	Perennial	10-12 lbs. Broadcast 3- 6 lbs. Mixtures	Fall and Spring	Deep rooted and drouth resistant.
DALLIS GRASS	Perennial	2-4 lbs. in Mixtures	Fall and Spring	Will stand excessive moisture. Is also drouth resistant when established.
HARDING GRASS	Perennial	8-10 lbs. Broadcast 2- 4 lbs. in mixtures	Fall and Spring	Produces good growth during winter months in central valleys. Drouth resistant.
LADINO CLOVER	Perennial	4-6 lbs. Broadcast 2-4 lbs. Mixtures	Fall and Spring	Most widely used of all pasture clovers. Requires frequent irrigation; will bloat unless planted with grasses.
MEADOW FESCUE	Perennial	8-15 lbs. Broadcast 4- 8 lbs. Mixtures	Fall and Spring	Light to heavy soils, well drained. Excellent in mixtures.
ORCHARD GRASS	Perennial	20-25 lbs. Broadcast 3- 8 lbs. in Mixtures	Fall and Spring	Best on medium soils not excessively moist. Somewhat drouth resistant. Widely used.
RED CLOVER	Short-lived Perennial	10-12 lbs. Broadcast 2- 4 lbs. in Mixtures	Fall and Spring	Rich, well-drained soils. Not adapted to the central valleys.
RED TOP	Perennial	2-5 lbs. in Mixtures	Fall and Spring	Wide adaption—dry to wet. Seldom used in central valleys.
REED CANARY GRASS	Perennial	8-10 lbs. Broadcast 2- 5 lbs. in Mixtures	Fall and Spring	Swampy lands in cool locations. Not adapted to warmer areas.
RHODES GRASS	Perennial	6-8 lbs. Broadcast 2-3 lbs. in Mixtures	Early Spring	Will tolerate some alkali, and make good summer growth in warm areas.
RYEGRASS, DOMESTIC	Annual	20-25 lbs. Broadcast 4- 8 lbs. in Mixtures	Fall and Spring	Widely adapted to all soils with sufficient irrigation. Generally used in mixtures.
RYEGRASS, PERENNIAL	Perennial	20-25 lbs. Broadcast 4- 8 lbs. in Mixtures	Fall and Spring	Best of the Ryegrasses. Slower in growth than the annual, but grows for longer period.
STRAWBERRY CLOVER	Perennial	6-8 lbs. Broadcast 2-4 lbs. in Mixtures	Fall and Spring	Needs constant moisture supply but will tolerate some alkali.
SUBTERRANEAN CLOVER	Annual		l and Early Spring	Produces early feed on light soils.
SWEET CLOVER, WHITE BLOSSOM	Biennial	15-20 lbs. Broadcast 4- 6 lbs. in Mixtures	Fall and Spring	Well drained soils, moderate irrigation. Will withstand considerable alkali.
SWEET CLOVER, HUBAM	Annual	15-20 lbs. Broadcast 4- 6 lbs. in Mixtures	Fall and Spring	Well drained soils, moderate irrigation. Will withstand considerable alkali. Adapted only to warmer areas.
SWEET CLOVER, YELLOW BLOSSOM	Biennial	15-20 lbs. Broadcast 4- 6 lbs. in Mixtures	Fall and Spring	Well drained soils, moderate irrigation. Will withstand considerable alkali.
TALL FESCUE	Perennial	10-15 lbs. Broadcast 2- 6 lbs. Mixtures		Similar to Meadow Fescue, but taller. Same soil and moisture conditions.
TALL MEADOW OAT GRASS	Perennial	10-18 lbs. Broadcast 2- 8 lbs. Mixtures	Fall and Spring	Adapted to cold regions. Partially drouth resistant.
TIMOTHY	Perennial	10-12 lbs. Broadcast 2- 5 lbs. in Mixtures	١.	Requires cool, moist climate. Not adapted to central valleys.
WHITE DUTCH CLOVER	Perennial	4-6 lbs. Broadcast 2-4 lbs. Mixtures	Fall and Spring	Adapted to most soils (except alkali) when frequent irrigation is possible. Ladino is preferable.

MONTHLY PLANTING GUIDE

JANUARY

VEGETABLES—Seeds of Asparagus, Beets, Brussel Sprouts, Cabbage, Carrots, Chicory, Corn Salad, Cress, Eggplant, Kale, Kohl Rabi, Lettuce, Mustard, Onions, Parsley, Peas, Peppers, Potatoes, Radish, Rhubarb, Salsify, Spinach (Winter), Tomatoes, Turnips.

FLOWERS—Sow seeds of hardy annuals in the open ground: Acroclinium, Alyssum, Antirrhinum, Calendula, Calliopsis, Candytuft, Centaurea, Annual Chrysanthemums, Clarkia, Larkspur, Lupin, Mignonette, Nigella, Poppies, California Poppy, Wild Flower Seed and Sweet Peas.

FEBRUARY

VEGETABLES—Seeds of Asparagus, Beets, Beans, Cabbage, Carrots, Celery, Chives, Chicory, Corn, Corn Salad, Cucumbers, Eggplant, Horse Radish, Kale, Kohl Rabi, Leettuce, Mustard, Onions, Parsnip, Peas, Peppers, Potatoes, Sweet Potatoes, Squash, Radish, Rhubarb, Salsify, Spinach (Summer), Tomatoes, Turnips.

FLOWERS—Sow seeds in open ground: Acroclinium, Antirrhinum, Calendula, Calliopsis, Centaurea, Early Flowering Cosmos, California Poppy, Larkspur. Linum, Lupins, Mignonette, Nemophila, Nigella, Poppies, Scabiosa and Sweet Peas.

Sow seed in boxes: Balsam, Begonia, Coreopsis, Gaillardia, Hollyhock, Hunnemannia, Lobelia, Mimulus, Pentstemon, Petuna, Perennial Poppies, Salvia, Stocks and Viola Cornuta.

MARCH

VEGETABLES—Seeds of Artichoke, Asparagus, Beets, Beans, Cabbage, Chicory, Corn (Sweet and Field), Cucumbers, Eggplant, Kale, Lettuce, Melons (Musk and Water), Okra, Onions, Parsley, Parsnips, Potatoes, Sweet Potatoes, Pumpkin, Radish, Rhubarb Seed, Salsify, Spinach (Summer), Squashes, Tomatoes.

FLOWERS—Sow seeds in open ground: Acroclinium, Ageratum, Alyssum, Antirrhinum, Arctotis, Amaranthus, Balsam, Brachycome, Bartonia, Calendula, Calliopsis, Candytuft, Centaurea, Clarkia, Annual Chrysanthemum, Early Flowering Cosmos, Daisies, Four o'Clocks, Godetia, Gomphrena, Gypsophila, Helichrysum, Larkspur, Linum, Lupin, Marigold, Mignonette, Nasturtium, Nemesia, Nemophila, Nigella, Phlox, Poppy, Scabiosa, Sunflower and Sweet Peas.

Sow in seed boxes or with some protection for transplanting later: Asters, Begonia, Bellis, Daisy, Celosia, Columbine, Canterbury Bells, Coreopsis, Cyclamen, Dahlia, Gaillardia, Gerbera, Heliotrope, Hunnemannia, Lobelia, Matricaria, Myosotis, Pentstemon, Petunia, Poppies, Salvia, Shasta Daisy, Statice, Sweet William, Verbena, Viola, Wallflower, Zinnia. Sow seeds of Vines.

APRIL

VEGETABLES—Seeds of Artichoke, Asparagus, Beets, Beans, Carrots, Cabbage, Celery, Corn (Sweet and Field), Cress, Eggplant, Kale, Lettuce, Melons (Musk, Water and Casabas), Okra, Onions, Parsley, Peas, Peppers, Parsnip, Potatoes, Sweet Potatoes, Pumpkin, Radish, Rhubarb Seed, Salsify, Spinach (Summer), Squash, Tomatoes.

FLOWERS—Seeds of Abronia, Acroclinium, Ageratum, Antirrhinum, Amaranthus, Asters, Balsam, Aquilegia, Begonia, Bellis, Brachycome, Calendula, Calliopsis, Candytuft, Canterbury Bells, Carnation, Annual Chrysanthemum, Celosia, Centaurea, Clarkia, Coreopsis, Cosmos, Cyclamen, Dahlia, Daisies, Delphinium, Digitalis, Dianthus, Gaillardia, Godetia, Gerbera, Gypsophila, Gomphrena, Heliotrope, Helichrysum, Hunnemannia, Hollyhock, Larkspur, Lobelia, Linum, Lupin, Marigold, Myosotis, Mirabilis, Mimulus, Mignonette, Nasturtium, Nemesia, Licotiana, Nigella, Pentstemon, Petunia, Phlox, Poppies, Portulaca, Salvia, Salpiglosis, Scabiosa, Schizanthus, Stevia, Stocks, Statice, Sweet William, Verbena, Viola, Sunflower, Wallflower, Zinnia.

MAY

VEGETABLES—Seeds of Artichoke, Asparagus, Beets, Beans, Cabbage, Carrots, Celery Plants, Corn (Sweet and Field), Cucumber, Eggplant, Lettuce, Melons (Musk, Water and Casabas), Okra, Onions, Parsley, Parsnip, Peas, Peppers. Transplant Potatoes, Sweet Potatoes (Plants). Pumpkin, Radish, Rhubarb, Salsify, Spinach (Summer), Squash, Tomato.

FLOWERS — Seeds of Abronia, Acroclinium, Ageratum, Amaranthus, Asters, Balsam, Carnation, Calendula, Celosia, Centaurea, Calliopsis, Cosmos, Daisies, Annual Chrysanthemum, Candytuft, Dianthus, Gaillardia, Lobelia, Larkspur, Marigold, Matricaria, Hunnemannia, Gomphrena, Gypsophila, Helichrysum, Nasturtium, Nemesia, Necotiana, Nigella, Phlox, Portulaca, Salvia, Salpiglossis, Scabiosa, Schizanthus, Stevia, Sunflower, Statice, Zinnia.

JUNE AND JULY

VEGETABLES—Seeds of Artichoke, Beets, Beans, Cabbage, Carrots, Celery Plants, Corn (Sweet and Field), Cucumber, Eggplant, Lettuce, Melons (Musk, Water and Casabas), Okra, Parsley, Parsnip, Peas, Pepper Plants, Potatoes, Sweet Potatoes (Plants), Pumpkin, Radish, Spinach (Summer), Tomato.

FLOWERS — Seeds of Calendula, Candytuft, Cosmos, Centaurea, Cineraria, Daisies, Marigold, Nasturtium, Portulaca, Poppies, Salpiglossis, Zinnia.

AUGUST

VEGETABLES — Artichoke, Beets, Beans, early varieties; Brussels Sprouts, Cabbage, Cauliflower, Carrots, Chicory, Corn, Cress, Cucumber, Eggplant, Endive, Garlic, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onion, Parsley, Parsnip, Peas, Potatoes, Radish, Salsify, Spinach (Summer), Turnips.

FLOWERS—Calendula, Cineraria, Centaurea, Cosmos, Pansies, Primula, Stocks, Sweet Peas. Begin sowing seeds of hardy perennials for next year's flowering, such as Aquilegia, Bellis, Daisy, Canterbury Bells, Coreopsis, Cyclamen, Delphinium, Digitalis, Forget-me-not, Gaillardia, Hollyhocks, Pentstemon, Perennial Poppies, Phlox, Pyrethrum, Snapdragon, Verbena, Viola and Wallflower.

SEPTEMBER

VEGETABLES—Seeds of Artichoke, Beets, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Chicory, Cress, Cucumber, Endive, Garlic, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onions, Parsley, Parsnip, Peas, Potatoes, Radish, Salsify, Spinach (Winter), Turnips.

FLOWERS—Seeds of Calendula, Centaurea, Cineraria, African Daisy, Nemesia, Cosmos, Pansy, Primula, Stocks and Winter Sweet Peas. Continue sowing hardy perennials for next year's flowering, such as Aquilegia, Bellis, Daisy, Canterbury Bells, Coreopsis, Cyclamen, Delphinium, Digitalis, Forget-me-not, Gaillardia, Hollyhocks, Pentstemon, Perennial Poppies, Phlox, Pyrethrum, Snapdragon, Verbena, Viola and Wallflower.

OCTOBER

VEGETABLES—Seeds of Beets, Brunssels Sprouts, Cabbage, Carrots, Chicory, Cress, Endive, Garlic, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onions, Parsley, Parsnip, Peas, Radish, Salsify, Spinach, Turnips.

FLOWERS—Continue sowing seeds for winter blooming of Calendula, Centaurea, Cineraria, Cosmos, African Daisy, Dianthus, Nemesia, Phlox, Pansy, Primula, Scabiosa, Stocks and Winter Sweet Peas.

Begin sowing annuals in open ground for early spring blooming: Acroclinium, Alyssum, Antirrhinum, Bartonia, Candytuft, Calliopsis, Clarkia, Annual Chrysanthemums, California Poppy, Larkspur, Lupin, Mignonette, Nigella, Poppies, California Wild Flowers. Continue sowing perennials for next year's flowering: Aquilegia, Bellis, Canterbury Bells, Coreopsis, Cyclamen, Delphinium, Digitalis, Forget-me-not, Gaillardia, Hollyhocks, Pentstemon, Perennial Poppies and Phlox, Pyrethrum, Snapdragon, Verbena, Viola and Wallflower.

NOVEMBER

VEGETABLES—Seeds of Beets, Brussels Sprouts, Cabbage, Carrots, Chicory, Cress, Garlic, Kale, Kohl Rabi, Lettuce, Leek, Mustard, Onions, Parsley, Peas, Radish, Salsify, Spinach (Winter), Turnips.

FLOWERS—Seeds of hardy annuals: Acroclinium, Alyssum, Antirrhinum, Bartonia, Calendula, Candytuft, Calliopsis, Clarkia, Annual Chrysanthemums, California Poppy, Dianthus, Larkspur, Lupin, Mignonette, Nigella, Nemesia, Pansy, Phlox, Stocks, Winter Sweet Peas and California Wild Flowers.

DECEMBER

VEGETABLES—Artichoke Plants, Asparagus Roots, Seeds of Beets, Brussels Sprouts, Cabbage, Chicory, Cress, Endive, Garlic, Horse Radish, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onions, Parsley, Parsnips, Peas, Potatoes, Radish, Rhubarb Roots, Salsify, Spinach (Winter), Turnips, Onion sets.

FLOWERS—Sow seeds of hardy annuals: Acroclinium, Alyssum, Antirrhinum, Bartonia, Calendula, Candytuft, Calliopsis, Clarkia, Annual Chrysanthemums, California Poppy, Dianthus, Larkspur, Lupin, Mignonette, Nigella, Nemesia, Pansy, Phlox, Stocks, Winter Sweet Peas and California Wild Flowers.

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